

London 1752

The GENTLEMAN and LADY's PALLADIUM

For the Year of our Lord 1752 ;

The first YEAR Corrected to *Solar Time*, and the general Date of EUROPE ; with useful *Tables*, and the Principal one, by the Right Honble GEORGE, Earl of MACCLESFIELD.

Also a ROYAL DIARY, or Complete EPHEMERIS, with the Sun's Place and Declination, calculated to *Seconds*, every Day in the Year, for safely conducting Ships at Sea, in finding the true Latitude. New *Ænigmas*, *Queries*, &c. with an infallible Receipt to make a Modern Physician. Of Annuities. Rudiments of French. The CABINET disclos'd ; An Express from the Emperor of the Moon ; Proposals for Building Hospitals for the Lazy all over the Kingdom. MORALITY applied to Practice. Spinoza's Notions, and Atheism confuted, &c. Of general Use and Entertainment, especially for the British Youth. The Fourth Number published of this Kind.

By the AUTHOR of the LADIES DIARY.

1. Tho' the *disloyal* rage, and shew their Spight,
The *Maxim's* true "Whatever is, is Right."



3. Tell me the CHIEF, who e'er deserv'd a Crown
That did not *Arts* befriend to seek Renown.

Errors Abroad we find Reform'd at Home.

4. What's better known, *Thou* prostituted Knave,
Rebels we see their Country wou'd enslave ?
Behold, and fear him, coming from afar,
Bedeck'd with all the Ornaments of War ? *Χειρὸν μὲν τοῦ Στρατός.*

LONDON, Printed for R. BARDWIN, at the Rose in *Pater-Noster-Row*. MDCCLII.

I always am ready to oblige

PREFATORY ODE.

TO WISDOM.

O PALLAS! Queen of ev'ry Art,
 That glads the Sense, and mends the Heart,
 Blest Source of purer Joys!
 In ev'ry Form of Beauty bright,
 That captivates the mental Sight
 With Pleasure which ne'er cloy; ;
 To thy unspotted Shrine I bow,
 Attend thy modest Suppliant's Vow,
 That breaths no wild Desire;
 But taught by thy unerring Rules,
 To shun the fruitless Wish of Fools,
 To nobler Views aspire.
 When Fortune drops her gay parade,
 When Pleasure's transient Roses fade
 And wither in the Tomb;
 Unchang'd is thy immortal Prize,
 Thy ever verdant Laurels rise,
 In undecaying Bloom.
 From Envy, Hurry, Noise, and Strife,
 The dull Impertinence of Life,
 In thy Retreat I rest;
 Pursue thee to the peaceful Groves,
 Where Plato's sacred Spirit roves
 In all thy Beauties rest.
 He bad Ilissus' tuneful Stream,
 Convey the philosophic Theme,
 Of perfect, fair, and good;
 Attentive Athens caught the Sound,
 And all the list'ning World, around,
 In awful Silence stood:
 Reclaim'd her wild, licentious Youth,
 Confess'd the potent Voice of Truth,
 And felt it's just Controul;
 The Passions ceas'd their loud Alarms,
 And Virtue's soft persuasive Charms
 O'er all their Senses stole.
 Thy Breath inspires the Poet's Song,
 The Patriot's free unbiass'd Tongue,
 The Hero's gen'rous Strife;
 Thine are Retirement's silent Joys,
 And all the sweet engaging Ties
 Of still domestic Life.
 O send her sure and steady Ray,
 To regulate my doubtful Way,
 Thro' Life's perplexing Road;
 The Mists of Error to controul,
 And, thro' it's Gloom, direct my Soul
 To Happiness and Good.

Beneath her clear discerning Eye,
 The visionary Shadows fly,
 Of Folly's painted Show;
 She sees thro' ev'ry fair Disguise,
 That all but Virtue's solid Joys,
 Are Vanity and Woe.
 Not Fortune's Gem, Ambition's Flame,
 Nor Cytherea's fading Bloom,
 Be Objects of my Pray'r;
 Let Avarice, Vanity, and Pride,
 Those envy'd glitt'ring Toys, divide
 The dull Rewards of Care.
 To me, thy better Gifts impart,
 Each moral Beauty of the Heart,*
 By studious Thoughts refin'd;
 For Wealth, the Smiles of sweet Content,
 For Pow'r, it's amplest best Extent,
 An Empire o'er the Mind.

—*Ingenuas didicisse fideliter Artes
 Emollit Mores, nec finit esse feros.*

Ov. Ep. ix. l. 2. de Ponto, 7. 47.

* See Mr. Christopher Smart's late inimitable Prize-Poem on the Im-
 mensity of the Supreme Being. Sold by Mr. Newberry, at the Bible and
 Sun, in St. Paul's Church-yard.

THE GENTLEMAN and LADY's PALLADIUM;

For the Year 1752.

I. *Ænigma Latinum.* Ab D^{no} Danieli Iliff.

Corpore parva quidem sed inest mihi maxima Virtus.
 Sunt oblita quidem nec sacra scripta mei;
 Spiritus est magnus roseum nec culpa ruborem
 Sontem perniciem nec mihi germen habet.

II. *Ænigma Latinum.* à Juvene.

*Ipsa sibi Proles suus est Pater & suus Hæres,
 Nutrix ipsa sui, semper alumna sibi;
 Ipsa quidem, sed non eadem, quia & ipsa, nec usu,
 Æternam vitam, mortis adepta bono ipsa est.*

Ænigme Francois. Par Monsieur Randles.

*Jambes J'ay, mais marche guerre
 Je medit de tout, mais jamais ne parle.*

New *Ænigmas*, to be answer'd in the next Year's *Palladium*.

I. *ÆNIGMA* 37. By *Upnorenfis*.

An *Ænigmatical Dialogue* between *Neptune* and *Thetis*.

Thetis. RISE, *Neptune*, from thy wat'ry Bed,
Thrice wave thy *Trident* round my Head,
Conduct me to some coral Grove,
To find th' *Obdurate* that I love.

Neptune. Describe your *Fav'rites* Shape and Mein,
Tell me where lately he was seen?
Say does he in my Waters rove,
Or breath the purer Air above?

Thetis. Like *Proteus*, he, his Guilt to screen,
In different Shapes is often seen;
'Twas on a Rock I met him last,
But oh! that happy Minute's past.

Neptune. Then he, perhaps, is fled to Land,
Impatient at my rough Command.
Does he his Being owe to me,
Or boast an earthly Progeny?

Thetis. To you alone he owes his Breath,
To th' other Element his Death;
But there—oh! there he lives in State,
A thousand Lovers haunt his Gate.

Neptune. So Rakes their Patrimony spend,
Who on the faithless Fair attend,
Deluded with a dainty Bit,
They unconcern'd and thoughtless sit,
Incessant Toil, and Pain endure,
And Poverty or Death procure.

Thetis. So we with Charms superior curs'd,
(Of all the Gifts of *Jove* the worst)
While Crowds of Lovers panting lie,
And fawn and faint, and sink and sigh,
On some false Friend, wont to betray,
Regardless throw ourselves away.

Neptune. Come, *Thetis*, to my Palace come,
I'll call th' amphibious *Rover* Home—
But hold! —in yonder *Grot* he lies
Immur'd, and all my Art defies.

Thetis. If he's in *Danaë's* brazen Tower,
I'll find him in a golden Show'r,
And as the liquid Oar he sips,
I'll o'er his spread my longing Lips.

Neptune. Go then, fair Nymph, go try your Skill,
And with you take what Force you will;
I've Arms enough, and Men at Hand,
All which, or Part, you may command.—

Thetis. No, SIR, to him alone I'll glide,
And 'twixt my Breasts this *Dagger* hide;
If he shou'd unrelenting prove,
Deaf to my Moan, and slight my Love,
I'll stab him! as he he seeks for Food.

II. ENIGMA 38. By *Lucinda*.

1. FEW knew the Time I first appear'd,
Or when my Reign began;
This Point, the Ancients have not clear'd
To justify my *Plan*.
2. Howe'er from *Scripture*, I conceive
And boldly do aver,
I'm not so old as *Grandams Eve*,
Nor plead my Birth from her.
3. If I from *Sarah*, or from *Ruth*
My Pedigree shou'd trace,
Perhaps I might mistake the Truth,
And my whole Scheme deface
4. Emblem of Innocence am I,
As *Parian Marble* white;
For me the boldest *Heroes* sigh
In me the Fair delight.
5. Deep Wounds, I with a Touch can heal,
As *Kings* the Evil cure;
Yet from the *Poison* I conceal,
My Patients more endure.
6. Happy the Youth whom I enclose,
Not always so the Man;
From me the *Former's* Joy arose,
The *Latter's* Woe began.
7. Small's the *Domain* which I possess,
The *Little World* I bound,
Yet, in this Circle, most confess,
All Heart can wish is found.
8. Here rising Hills and fertile Plains,
The *Pink* and *Lilly* show,
There Crops requite the Sower's Pains,
And *Milk* and *Honey* flow.
9. Here forest Trees rear up their Heads
Above the silver Field,
And there are soft and mossy Beds,
Which grateful Slumber yield.
10. Here *Virtue's* Temple rises high,
On *Eben* Pillars built,
There *Vice* turns up her baleful Eye,
Immers'd in Sin and Guilt.
11. As in all Kingdoms, so in mine
Are Good and Evil found;
From this Account my Name divine,
And clasp your Wishes round.

III. ENIGMA 39. By Miss *Shirley of Dorsetshire*.

1. BY Birth I am low and obscure,
By Nature unpolish'd and rough;
Strict Discipline forc'd to endure,
I now am grown civil enough.
2. Altho' sharp as ever you saw,
My Temper is known to be good,
And tho' often challeng'd to draw,
I always am tender of Blood.

The GENTLEMAN and LADY'S

3. Each Age and Complexion I please,
And hit their Designs to a Hair,
But still find it most for my Ease
To deal with the *Young* and the *Fair*.
4. Even *Ladies* afford me their Grace,
Such Honour is owing to this,
That tho' I ne'er come near your Face,
I often procure you a Kiss.
5. To spruce myself up I don't fail,
When tir'd with hard Work I have been,
Then clap my Head under my Tail,
And rest 'till I'm call'd for again.

IV. ÆNIGMA 40. By Mr. *Daniel Iliffe*.

YE Fair and Wise who justly claim
The glorious *Prize* in Wisdom's Name,
Say what I am that shines so bright,
Profuse of Bliss crown'd with Delight.
In me eternal Pleasures reign,
And Plenty leads my wanton Train,
I'm none of those obsequious Fools,
Who spend their Life by scanty Rules;
And ne'er concern'd at all will be,
With trifling dull Formality.
By me all gloomy Nature's gay,
'Tis I add Pleasure to the Day;
My Graces all with Grandeur move,
And form both Majesty and Love,
Consider well all formal Saints,
See with what Pain they bear Restraints;
Wish as they wish, and then you'll find
The Thing desir'd by all Mankind.

V. ÆNIGMA 41. By *Oxonienfis*.

WITH Morning *Lark* I hail the coming Day,
With *Philamel* lament the Light's Decay:
Mounted aloft to distant Worlds I fly,
And Things incomprehensible descry;
See golden Groves, and Rocks of Diamonds rise,
And *Principalities* and *Pow'rs* devise
With Confidence relate the pleasing Dreams,
Drawn by a strong Imagination's Beams;
Delude the Credulous, divert the Gay,
And trembling send the Ignorant away.
As Counsellors the given Law can wrest,
And for their wealthiest Clients plead the best;
So I, whatever other Mortals think,
Espouse his Cause where best I eat and drink.
As learn'd *Physicians* choicest Med'cines try
To save the *Rich*, but let the *Pauper* die;
So I my *Christian* Principles display,
The Wealthy feed, but drive the Poor away;
And wheresoe'er a well fill'd Sponge I find,
'Till I have squeez'd it dry, am always kind.

Where Honour, Opulence, and Pow'r reside
 I choose to stay, but my Intention hide.
 There spread my Net—there exercise my Art,
 And play the *Sycophant* in ev'ry Part;
 But soon as I have caught the wish'd for Prey
 I decently take leave, and post away;
 My Benefactor slight—oppress the Poor,
 And beg for *Alms* at ev'ry Peasant's Door.
 —Such are my Tenets—whether Good or Evil—
 Interest my God is—Poverty my Devil.

VI. ÆNIGMA 42. By *Blowfabella*.

1. 'TIS evident that all the human Race
 Differ in Colour, Size, or Face,
 And seldom two *alike* are ever seen;
 In us the same Variety appears,
 In Youth, and in declining Years,
 Whether we seek the Grove, or soil the Green.
2. If to the wat'ry Element we stray,
 Or in the flowry Meadow play,
 Or, in Earth's Bowels Mansions we provide;
 Whether we choose to deck the spangled Plain,
 Or labour to encrease your Gain,
 Our Forms and Stations are diversify'd.
3. Some thick and short, some slender are and tall,
 Some large, and some exceeding small;
 Others, among our *Species*, may be found
 Artful, industrious, beautiful, and kind,
 For Slaves to Opulence design'd,
 And, as the Globe of Earth and Water, round.
4. Yet, not in Shape alone, but Colour too,
 We differ as you *Mortals* do;
 For to our num'rous Family are given
 Various Complexions, *Ruddy, Brown, and Fair*,
 Of which we take but little Care,
 But wear them as they were design'd by Heav'n.
5. The *Belles* and *Beaus* who shine in rich Attire,
 Our *fairest Progeny* admire,
 Who all their Wardrobes with fresh Goods supply;
 But ah! hard Fate! like the industrious *Bee*,
 They suffer for their Industry,
 And to reward their Toil, are doom'd to die.
6. The innocent and ruddy *Country-maid*,
 A harmless Captive is betray'd;
 Permitted for awhile in Peace to sleep,
 At length, or to divert, or to assuage
 The Tyrant Captor's vengeful Rage,
 Stab'd to the Heart is thrown into the Deep.
7. The *Brown*, whom ev'ry thoughtless *Lou* admires,
 Upon her mossy Bed perspires,
 And wastes in lazy Indolence her Days;
 Yet, if he chance to hit the Traveller's Eye,
 As melancholy passing by,
 He sometimes with Delight her Form surveys.

3. Another *Species* of our numerous Clan,
 The *Scriptures* say resemble Man;
 For if, insulted, they *Resentment* show,
 And what's more strange—tho' weaker far
 They seem to meditate a War;
 And turn their feeble Arms against the Foe.

VII. *ÆNIGMA* 43. By Mr. *Christopher Mason*.

FROM Court to Court with Courtiers speed I fly
 Sometimes the Truth I bear, sometimes the Lye.
 When haughty *Princes* hostile War do wage,
 No Neutralist—for one or both engage;
 Revenues large are levied for my Use
 Yet misapplied—the Public's great Abuse,
 I bear great Sway among the brilliant Fair,
 Yet Critics say I have no *Speker* there!
 To be or not to be is now the Case,
 Whilst yet I am, I cannot shew my Face:
 If not to be—my Fate, ye Fair, deplore!
 No sooner known my *Being* is no more.

VIII. *ÆNIGMA* 44. By Mr. *J. Ramsay of Morpeth, North.*

I'M fat as a Hog, and nick nam'd like a Frog,
 Yet the best of the Gentry do use me;
 And when I'm made fine, I please them when they dine,
 In different Ways as they choose me.
 Now, as to my Shape, the *Beau* I do ape,
 Tho' of Legs I can boast of but one;
 I am very upright, tho' my Body is slight,
 And have but one Foot to stand on.
 If you seek me at Night, you will seldom do right,
 'Cause then I am hard to be found;
 But at Noon I am seen standing up, on the Green,
 With my Brothers and Sisters around.
 And, Ladies, 'tis true, I'm as comely as you,
 Tho' martyr'd I am, like a Traytor;
 So I beg you'll by Fits, make use of your Wits,
 And tell me my Name without Satyr.

IX. *ÆNIGMA* 45. By *Anonymous*.

MY Body is but small, of slender Size,
 A monstrous Head I have, large Mouth and Eyes;
 And, like a *Tad-pole*, seem of Head and Tail,
 Let one but wag the other ne'er does fail.
 I'm Topsy-turvy turn'd—and sometimes apt
 To be hot headed—then to Bed I'm clapp'd.

X. An *Historical ÆNIGMA* 46. By Mr. *Ralph Hulse*.

WHEN fam'd *Eliza* grac'd the *British* Throne,
 And ev'ry Virtue round her Person shone,
 I, in the *Indies*, by a Knight was caught,
 And as a Rarity to *London* brought:
 'Twas there I got acquainted with his Grace,
 Who soon procur'd for me, at Court, a Place.

My *Indian Habit* not allow'd to wear,
 I, in the *English Mode*, must needs appear ;
 And for my Country's Sake now Arms I bear.
 So much each *Subject* for my Person strove,
 My Inclination prompted me to rove,
 At three Years old, in ev'ry Country been,
 Tho' Faces ten Times more than Towns had seen.
 Strange, in my Travels, I a Miser met,
 But I no Comfort from the *Churl* cou'd get ;
 He close confin'd me from the Sight of Day,
 Where, still imprison'd, 'till his Death I lay.
 At his Decease, a *Prodigal*, his Heir
 Releas'd me soon, I soon from him got clear.
 'Twas now I travell'd 'till the Civil Wars,
 When all the Kingdom shook with inbred Jars.
 The Parliament, who now to make a Show,
 On me a Pair of Breeches did bestow ;
 With whom I travell'd till King *William's* Reign,
 And by my Labours did myself maintain.
 At length, my Taylor, with a Pair of Sheers,
 In twain my Doublet cut and cropt my Ears.
 From Place to Place about thus curtail'd led,
 At last I grew ashamed to shew my Head !
 When lo a gracious Friend in my Distress,
 Obtain'd for me a far more decent Dress,
 So, well with me agrees this happy Clime,
 I'm brisk as ever, at this present Time.
 Since I a better Title may assume,
 On mighty Errands now am sent from Home.

XI. ÆNIGMA 47. By An *India Factor*.

BY many I'm seen—by more heard ev'ry Day,
 And all round the Kingdom alternately stray,
 Most Courts I frequent—and am useful in State,
 And sometimes assist in important Debate.
 Without me no *Bishop* * cou'd e'er gain a See,
 And the rest of the *Clergy* † oft make use of me.
 Without me the *Sailor* would scarce ever prate
 Of the Wonders he saw, or his Dangers relate.
 With me in his *Knapsack* the Soldier delights,
 For 'tis I raise his Fame, and enhance his Exploits.
 Without me 'tis own'd that the Tradesman can't thrive,
 Who by me is alert, and keeps Credit alive.
 In short, all Mankind, of every Degree,
 Have sooner or later had Dealings with me.
 You may venture to swear that I lodge in the Breast
 Of that Mortal who says, that I ne'er was his Guest.
 For, with Maids, and with Batchelors, Husbands and Wives,
 I now and then stay all the Days of their Lives.

* Every Bishop before *Installment*, says to the Conge d'Elire, *Nolo Episcopari*.

† Every Parson before he is inducted into his Benefice swears that he neither directly, or indirectly, by Himself, or any other, made Interest, paid any Money, &c. to procure it.

From what's said one wou'd think I ought to be priz'd,
 Yet where I reside I am justly despis'd!
 Nay what's worse—whene'er Honour and Interest jar,
 I a Friend interpose for Prevention of War;
 And tho' by both Parties I'm oft introduc'd,
 Hard Case! if to either made known, I'm abus'd.
 What's worse when oppos'd to a Gentleman's Face,
 A *Duel* ensues—and Death's sometimes the Case.
 But why should I longer to hide myself try?
 Look down and you'll instantly see where I lie.

XII. ÆNIGMA 48. By *Uphorenfis*.

1. IN the Hundreds of *Kent*,
 I make People repent,
 And there may be frequently found;
 But Excursions I make,
 For Variety sake,
 In the Skirts of the *Island* all round.
2. Some affirm I bewitch
 Both the *Poor* and the *Rich*,
 For to both I am very uncivil,
 'Who at first use me well,
 Wheresoever I dwell,
 Tho', at Heart, they wish me at the *Devil*.
3. Where I visit each Day,
 They to drive me away,
 A hundred Inventions will seek;
 But foreseeing Disgrace,
 Before I quit Place,
 I compound for *two* Days in a Week.
4. Soon tir'd of this *Treaty*,
 And bent to defeat me,
 Enrag'd they my Mansion invade;
 And, with *Powder* and *Ball*,
 They first batter the Wall,
 Then turn the Siege to a *Blockade*.
5. But, before I surrender,
 I make them remember,
 They engag'd with a dangerous Foe;
 For I do them such Wrong,
 That some all their Lives long,
 Can scarcely recover the Blow.

XIII. ÆNIGMA 49. By *Miss Price*.

1. UPON a downy Pillow I
 In Ease and Safety rest,
 No anxious Thoughts my Bliss destroy,
 Nor Troubles me molest;
 The tender *Saplings* bend about my Bed,
 And fan refreshing *Zephyrs* o'er my Head.
2. In diff'rent Climates thus I live,
 The *temp'rate*, cold, and dry;
 And where I my first Birth receive,
 There tarry 'till I die.

But tho' to me they all may claim some Right,
In some I more than others take Delight.

3. *Ardelia* pleas'd, my Form surveys,
And all my Beauty shows,
Her I attend to Balls and Plays,
And wherefoe'er she goes.

Flavia, to hide me, tries her utmost Art,
Lest I should cool the fav'rite Lover's Heart.

4. To two alike I'm never kind,
Nor the same Charms bestow ;
In me if one can Pleasure find,
The other meets with Woe ;

For I, like *Fortune*, blindly, Gifts bequeath,
Give *Stella* Happiness, make *Fira* grieve.

5. The Vulgar think I can unfold
The dark Decrees of Fate,
And, like the *Oracles* of Old,
Events prognosticate ;

So *Sydropsel* deludes th' enquiring Crew,
With what he nor the *Stars* yet ever knew.

6. Whether my happy Situation,
Kind Nature did bestow,
Or I, by strong *Imagination*,
Was order'd there to grow.

They best can tell who to the *Fair* gave Birth,
And form'd me from inanimated Earth.

Whoever answers the best Six approv'd Answers in Verse, before the
End of January next, has a Chance, by Lot, to win a Dozen Palladiums.

PRIZE-ÆNIGMA. By *Salopicensis*.

IN diff'rent Regions diff'rent is my Name,
I rove and change ; another yet the same,
Constant to borrow, thoughtless how to pay,
Like *Prodigals* I squander all away.
I am a Female, and to curb my Pride,
Like others of my Sex, have one blindside ;
My Looks are fair, my Visage pale and wan,
Sworn Foe to *Wedlock*, yet I keep a *Man*.
Feign'd *Chastity* ! my Midnight Rounds I keep,
And much Delight to kiss young Men asleep.
I'm old and young, a Prude, and yet a Lover,
A Twin by Birth, and have an elder Brother.
Physician he, to *Galen's* Methods true,
Well skill'd in *Herbs*, and some say *Min'rals* too ;
But, like the *Doctor*, careless of his Case,
He tipples, fumes, and spoils a handsome Face ;
Yet fond of *Ladies*, in his frisky Joke,
He pulls off *Cloe's* Tippet, Hood, and Cloak ;
And on her snowy Breasts his Fingers stray,
'Till tarnish'd Marks disclose the wanton Play.
Alas ! how like a *Flow'r* is ev'ry *Maid*,
Touch them they wither, handle them they fade.

My whole Expence my Brother does sustain;
 But yet one House can never hold us twain:
 Kind at a Distance—if we meet beware—
 Hostile we threaten—and prepare for War.
 He burns my Cap---when stung with female spite,
 I redder---tear his Eyes---and blind him quite!
 Women and Children sicken at the Sight.
 My Fury quickly spent, we end the Fray,
 Shake Hands and Kifs, and smiling march away.

The ROYAL ORACLE, or QUERIST.

I. Query 22. By Milo.

HOW is a Gentleman and a Soldier to behave on receiving Challenge from another, on a trifling Occasion?

II. Query 23. By Publicus.

WHAT is the best Method for preventing the frequent Robberies in and about London, and throughout the Kingdom?

III. Query 24. By Philanthropos.

WHY shou'd Any under the same Government stigmatize others for their Country, or Place of Nativity? And why shou'd the Name of *Irishman*, or *Scotsman*, be more odious than that of *Englishman*?

IV. Query 25. By Politicus.

WHICH Way, and how, might good be expected from a General Naturalization?

V. Query 26. By Beau Bugle.

AS the prevailing Fashion, among the Ladies, is to wear Caps, Wigs, Ruffs, Short Sacks, Jackets, &c. in Imitation of the Gentlemen, whether or not going into Breeches, would not further extend their Empire over them, by their Charms being made more conspicuous?

VI. Query 27. By Major Minimus.

WHAT is the Reason that a late useful Production, begot by a F. R. S. christen'd by the Name of *Mathematical Exercises*, and nurs'd by an *Apple-monger*, should come to an untimely End, after six Months?

VII. Query 28. By the Inspector General.

HOW many Subjects possess'd of ten thousand Pounds per Annum, in Land and Houses have we in England, Scotland, and Ireland, respectively?

VIII. Query 29. By Dublinensis.

WHETHER Assurance and Impudence are not often imputed to Merit, and Strength of Spirits?

IX. Query 30. By Virtuosus.

HOW is an offensive Adversary in Conversation, best answer'd?

X. Query 31. By Major Speedwell.

WHICH will afford a Wife without a Flaw, Mal, Mary-bone, Vauxhall, or Ranelagh?

XI. Query 32. By *Belinda of Oxford.*

TELL me, dear Querist, how to choose
A Husband for my happy Use?
If Town, or Country, will afford,
The best, and most obliging, Lord?

XII. Query 33. By *Astrea.*

WHETHER he that pirates the Copy of an *actual Survey* of a Country (after much Labour and Expence of the *actual Surveyor*) is not as much guilty of *Felony*, as he that forges a Merchant's Bill of Exchange? Or he that steals the Original *Plates* of the said Survey?

Whoever answers the following before the End of January next, has a Chance by Lot, to win a Dozen Palladiums.

PRIZE-QUERY. By *Metaphysicus.*

WHETHER the Reason commands the ruling Passion, or the ruling Passion the Reason? And whether the Will exerts itself as an Ally, or despotic Ruler, in respect of either?

New MATHEMATICAL QUESTIONS to be answered in the next Palladium.

QUESTION 42. By Mr. Thomas Cowper, Surveyor, at Wellingborough.

ON June the first I walk'd into the Fields Lat. $52^{\circ} 20'$.
To view those lovely Beauties Nature yields;
At Morning Ten, bright Phœbus shone so clear!
That but one Cloud swam in the Atmosphere;
The Shade of which fell on a spreading Tree,
On level Ground, Two hundred Yards from me;
The Cloud's true Altitude I found was then
(My Quadrant shew'd) Degrees Threescore and ten;
From whence, ingenious Artists, pray declare,
How far this Cloud was off, how high in Air?

II. QUESTION 43. By *Taptinos.*

IN an oblique angled Triangle there is given the three Lines drawn from the three Angles, bisecting the opposite Sides, 15, 16, 17, to find the Sides?

III. QUESTION 44. By Mr. James Terry of Portsmouth.

TWO Labourers, A and B, agree to remove 300 Fir-Masts for /.; each Mast is 40 Feet in Length, 8 Inches Diameter at the greater end, 6 Inches at the lesser, and weighs 300 Weight, in Form of a conical Frustum: A agreed to bear the greater End, B the lesser, a foot Distance from each Extremity; Query, how much of the Money must each Labourer receive, according to the Proportion of Weight he carries?

IV. QUESTION 45. By *Taptinos*.

THERE are three Numbers in Musical Proportion, their Sum is 39 and the Sum of their Squares 549; to find those Numbers?

V. QUESTION 46. By Mr. *Randles of Wem*.

FOR a *Frolick*, some Friends at a *Tavern* once met,
And eight Pounds and three Crowns did there spend at a Treat;
But, before the *Bill* call'd, two of them reel'd away,
When the rest had each ten Shillings more for to pay;
What Number of *Topers* in all did appear?
And now much did *Each* spend for his own proper Share?

VI. QUESTION 47. By Mr. *Roger Widger of Plymouth*.

GIVEN the *Ratio* of the Sides of a plain Triangle, the Line bisecting the Base, and the Angle which a Line bisecting the vertical Angle make with the Base, to *construct* and determine the Triangle?

VII. QUESTION 48. By *Upnorenfis*.

THE Difference between the outward Circumference of the *Brim*, and Circumference of the *Crown* of a *Beau's Kevenbullur-Hat*, is 36.6992 Inches; the Difference between the Area of the *Brim*, and Area of the *Crown's* Surface 111.2741 Inches; the Height of the *Brim*, above the *Crown*, when *cock'd*, 1 Inch 3 qrs; to find the Breadth of the *Brim*, and the Diameter, and Depth of the *Crown*? And also how many Pints of Wine the *Crown* will hold?

VIII. QUESTION 49. By Mr. *Heath*.

IN what Latitude (North or South) is the longest Day exactly one fourth Part of the Year?

IX. QUESTION 50. By *χρονόμενον πύξις*.

AT what Time will the *Hour*, *Minute*, *Second*, and *Third* Hands of a *Clock* be all *farthest* from one another, next after they are all conjoyn'd?

X. QUESTION 51. By Mr. *William Cottam*, at his Grace the Duke of *Norfolk's*.

A Cistern's Length, Breadth, and Depth, are 36, 20, and 25 Inches, which it's supplying Cock will fill in 25 Minutes; when, if it's evacuating Cock be set open, it will continue full, and the Water neither rise nor fall, *i. e.* the Cistern will neither overflow, nor grow emptier. Now, supposing the Cistern empty, and both Cocks to be open'd at once, requir'd a *general Rule* for determining the Time it would take in filling to 1, 4, 9, 16, 25, and 24 Inches Height?

XI. QUESTION 52. By Mr. *John Williams*.

AN Agent for a Company sold 21 Tuns of *Lead-Ore*, for which he receiv'd 143 *l.* 6 *s.* 6 *d.* the *Round Ore* was sold at 7 *l.* 10 *s.* and the *Small Ore* at 6 *l.* 10 *s.* per Tun; he forgot *how much* of each Sort was deliver'd, of which he desires to be inform'd, by a *general Rule* for

Solving all Questions of the like Nature, in Case he, or any other Person should be put to Difficulty again?

XII. QUESTION 53. By Miss *Sophia Western*, of Hull.

TO find the Velocity of a Projectile in a *Non-resisting Medium*, that shall describe a *Parabola*; supposing the Velocity of falling Bodies, in that *Medium*, to be as the *Altitudes* descended?

XIII. QUESTION 54. By *Philotheoros*.

THE Fences of a Piece of a Land are the Abscissa of a Parabola = 20 Chains (whose Parameter = 46 Chs.) a Portion of the parabolic Curve, and a Portion of the inscribed Semi-circle in the Semi Parabolic Space, with it's Diameter lying on the Ordinate; required the Content of the Land?

XIV. QUESTION 55. By Mr. *Alexander Rowe*.

A Lady being ask'd what Number of *Geese* and *Ducks* she had? Answer'd, if I had 8 more of each, I should have 8 *Ducks* for every seven *Geese*, and if I had eight less of each I should have seven *Ducks* for every six *Geese*? Query, how many had she of each Sort?

XV. QUESTION 56. By Mr. *John Ramsay*.

THREE Herbs I've growing in my Ground,
Call'd *Mint*, *Fennel*, and also *Hore-Hound*;
'Twixt the first two are Chains fifty-seven,
'Twixt the *Hore-Hound* and *Each* of those even;
From the *Hore-Hound* to the nearest Side*,
Six Chains exactly do divide;
And seventeen to Cuckold's square Corner,
What Acres have I, good Mr. *Horner*?

* Of a triangular Field.

Whoever sends an Answer before the End of February next, has a Chance, by Lot, to win a Dozen Palladiums.

PRIZE-QUESTION. By *Academicus of Woolwich*.

Useful for the expeditious Extraction of the Roots of Equations.

TO find the Value of x in a whole or rational Number; when $ax^2 + 1 = n^2$, or $ax^3 + 1 = n^3$, where a is any given whole Number, and n^2 a Square, and n^3 a Cube Number?

Paradoxes to be answer'd in the next Palladium.

I. Paradox. By *Cantabrigiensis*.

TWO Pieces of Paper, A and B, being plac'd against a Wall about two Feet asunder, about the Height of the Observer's Eye from the Ground, and he stands at the Distance of about 9 or 10 Feet from the Wall, in a Line right betwixt both Objects, he may see both those Objects at once, with his Left Eye shut, looking stedfastly towards A, the Left-hand Object; But, advancing towards the Wall directly forward, with his left Eye shut, and looking stedfastly at A, he will, at about one Foot nearer the Wall, lose Sight of the Right-hand Object; and

will recover Sight of the Right-hand Object B, at the Distance of about six Feet from the Wall. *Query, the Reason thereof?*

II. *Paradox.* By Monsieur Coborn of Woolwich.

A Ball being shot upwards so as to fall, directly, into the Mouth of the Canon, neither ascends nor descends perpendicularly in a right Line! Why so?

Answers to all the Ænigmas in last Years Palladium.

I. 23. GUNPOWDER.

II. 24. DIAMONDS.

III. 25. A CHEESE.

IV. 26. BEAUTY.

V. 27. A GRASHOPPER.

VI. 28. A PROMISE.

VII. 29. COCKADE.

VIII. 30. TOBACCO.

IX. 31. KNIFE and FORK.

X. 32. SPIDER.

XI. 33. AN APRON.

XII. 34. BRIBERY.

XIII. 35. MAGNETIC COMPASS.

French, a BISHOP.

Prize HOLLAND.

Lat. A CLOUD.

The PRIZE-ÆNIGMA, answer'd by Mr. Ralph Hulfe.

HOLLAND, the *poor distress'd* State, once known,
Is now, the *Rich, and High and Mighty*, grown.

The *same* answer'd by Mr. John Fish of Dartford, Kent,
From a *Daily Advertiser* for September, 1747.

It is DUTCHMEN: who of old
Deny'd their God to win *Japanian* Gold!
Who rais'd by *England* when depress'd and weak,
Their grateful Friendship bad *Amboyna* speak.

The *same* answer'd by Mr. John Chester.

Great Britain's Fish'ry *Batavia* threatens!
But HOLLAND'S *Frogs* shall flee from *British* Nets.

All the Ænigmas answer'd in the last Year's Palladium, on
the Pleasures of a Country Life. By FLORA.

I lead a happy rural Life,
Free from Noise, and free from Strife;
No Ornaments my Person deck,
No DIAMONDS COMP'ASS round my Neck;
My HOLLAND APRONS all my Pride,
I've Nought of Finery beside.
I keep my homely Cottage clean,
No bloated SPIDER can be seen;
I daily press my Father's CHEESE,
I milk his Cows—I hive his Bees.
Each Morn I to the Fields repair,
To watch and tend my fleecy Care;
Well pleas'd I view the INSECTS round,
Skipping along the verdant Ground.
At Noon, beneath some silent SHADE.

2. 13.
Pr. 11.

10

3

5

No KNIFE and Fork in Order plac'd, 9.
 Nor am I with a Side-board grac'd:
 Happier far than are the Great,
 In all the Luxury of State.
 Nor Wit nor BEAUTY can I boast, 4.
 I never was the Village Toast;
 No POWDER'D Fop can give me Pain, 1.
 Nor gay COCKADE my Heart obtain!
 I snuff at all such empty Fools; (*very well Miss!*) 7.
 The PRELATE's Jest, the Statesman's Tools. 8.
 Damon long since did PROMISE fair. French. 6.
 That none with me his Heart should share;
 His humble Fortune I'll partake,
 And slight all others for his Sake.
 No BAISRY shall CORRUPT my Love, 12.
 I'll ever true to Damon prove.

Ænigmas in last Year's Palladium answer'd by Mr. Elisha Titley of Marbury, in Cheshire.

DEAR Friend when your Token
 I open had broken,
 And found it just as you express'd,
 I toasted in Beer,
 To your happy New Year,
 And may you with Freedom be blest'd!
 Let no APRON insnare 11.
 You to taste of the Fare,
 Which Fools they think sweeter than Honey;
 Should the Virtue but want,
 She'll be SPIDER or ANT, 10.
 And still worse if she has got no Money.
 Each Time you come at Her,
 Expect she will FLATTER, 12.
 And a D'iamond Ring makes her but prouder;
 SNUFF and TEA will more please, 2.
 Than to squeeze Whey from CHERSE, 8.
 And she'll roar like a Gun charg'd with POWDER! 3.
 No COCKADISH BEAUTY 7-4.
 Can COMPASS your Duty, 13.
 Shun, as DUTCHMEN did Death *, such a Spouse; Prize.
 You may then take your FORK, 9.
 And your Bottle uncork,
 And, like GRASHOPPER, sing, and carouse. 5.

* When they last refus'd to Fight, in Flanders.

Acrostic on Virtue, by Mr. Daniel Cliffe, in Answer to the IVth Ænigma last Year.

View all the ample World around,
 In me the greatest Beauty's found;
 Regard ye Fair! my Steps pursue,
 To gain the Prize obtain'd by Few;
 Unerring I, with blazing Throngs,
 Enchant the Soul by glorious Songs.

Query 12. answer'd by Χρονολογονηκυ Ελληνος.

Public Registers of Debts, in every County, would prevent *Fraud*, and Extravagance, and inculcate the Principles of *Honesty*, and good *Oeconomy* amongst us; as well as put an End to the pernicious Practice of double and treble Mortgages on the same Lands; and guard against lending Money on bad Security.

Incumbrances upon most considerable Estates in this Kingdom being already known, the *Discovery* thereof can be no *Objection* to the passing an *Act* for registering Debts in every County, as it would promote the *Welfare* and *Tranquillity* of the Nation; while other political Courts of *Europe*, are endeavouring to reduce the Number of their *Lawyers*, and retrench their exorbitant *Fees*.

If Courts for the Recovery of small Debts were general, they would be of general Advantage by their easy Expence, speedy Issue, and Security of the Plaintiff's Money, not being paid into the Hands of such (*Vermis of the Law, and Enemies to Justice and Mankind*) as commonly withhold the best Part of it.

Query 13. answer'd by *Laicus*.

THIS Doctrine of *smiting one Cheek, and turning the other also*, was probably first taught in the Infancy of *Christianity*, to propagate the *Gospel*, and the Principles of *Patience* and *Forbearance*, among Individuals; at a Time when the Converts were *Few*, and when *Resentment* would have heighten'd their Punishment from their powerful Persecutors: For it never was a Doctrine betwixt different Nations, *repelling Force by Force*. And to reconcile this Doctrine, with the general Conduct of the Christian Part of the same Nations at this Day, seems to be as difficult as it would be to prevail with respective *Individuals*, or those under different Governments, to unite in the same Form of Worship. As what Mr. Dryden observes be true,

That Priests of all Religions are the same,

we shall find that the *Teachers* are more revengeful, and refractory than the *Hearers*. An Instance of which appears in the News from Paris of the 5th of Jan. 1750-51. N. S. "A few Days ago an extraordinary Council was held at Versailles, on the Affair of the Clergy, many of whom shew a perversè Spirit, and insist upon Principles and sacred Immunities, and talk as tho' they were ordain'd to draw the Wealth of the Nation to themselves, and contribute nothing towards it's Expence." This is a Specimen of the submissive Behaviour of the Catholic Priesthood; who, in this Point, I confess out-do those of our own Country. For, tho' no Persons living are more tenacious of their own private Property than the Protestant Clergy, yet, they never scruple to pay their Proportion of Taxes to the Public. And however harsh this Text may sound in an Age of Rapine and Plunder, where Property seems so precarious, the Doctrine before us, of *smiting one Cheek, and turning the other also*, was certainly well calculated for the Peace and Welfare of Society in Government; and to prevent petty Quarrels, and litigious Controversies about Trifles.

And where Example is so rare, the Precept should be preferr'd as far as it will bear.

* See Daily Advertiser, Dec. 31, 1750.

Query

Query 14, answer'd by *Amicus Honeſtus*.

DURING the late Reign of Sir *Thomas De Veil*, as a Magistrate, in *Bow Street, Covent-Garden*, he struck such a *Panic* in the several Gangs of *Thieves*, infesting the City and Suburbs of *London* and *Westminster*, that a *Street-Robbery* was then seldom heard of; whereas, now, every Day's Papers are crowded with numerous Accounts of such Villanies. Whence it appears he exceeded his *Successors*, vested with the same Office and Authority, in the Art of detecting Criminals, and of bringing them to Confession. This was Sir *Thomas's* Master-piece, a Knack or Penetration he had of surpassing the Rest of his Brethren. Mr. *Fielding*, as an Author, has entertain'd the polite Part of Mankind with several curious Pieces of Wit and Humour, and with some good Lessons of Morality: But the *Play-House* being compared with the *Church*, or the Entertainment of *Paux-Hall* with the Pleadings in *Westminster-Hall*, a distinguishing Judgment can easily discern the Difference.

Query 15, answer'd by a *Triumvirate* of Authors, at *George's Coffee-House, Temple-Bar*.

THO' the Employments of *Letter-Printer, Bookseller, Publisher, Plate-Printer, or Printseller* differ, yet they are Members of the same Body*, and consequently are possess'd, in some Degree, of the same Principles, subject to the same Temptations, and tainted with the same Crimes. By comparing their respective *Artifices*, the Reader will the better judge of the Truth and Justice of our Decision, with respect to their several Integrities.

The *Letter-Printer*, originally, had an undoubted Title to the free Exercise of all the five Branches of Business, but as the Number of Hands encreas'd, and Trade grew more extensive, they came to be divided into their present different Classes. The *Letter-Printer* was reduc'd to a State of Dependency, whose Situation with the *Bookseller*, is like the *Bailiffs* with the *Pettyfogger*. They must keep their Masters Secrets, be accessary to their Frauds, and submit to their Will and Pleasure, or else starve. Self-Interest, as well as Self-Preservation, is implanted in our Natures, and if one will not do dirty Work for Gain, another will.

The *Plate-Printer* has two Masters to serve, the *Bookseller* and *Printseller*, who can hardly be suppos'd to serve both with Integrity. We might as well expect he should be able to serve God and Mammon at the same Time.

The *Bookseller* and *Printseller* are the grand Corruptors, who communicate the Infection through the whole Tribe. These are wilfully fraudulent, whereas the others are only so by Compulsion.

The *Bookseller* preys upon Authors, as the *Printseller* does upon Engravers, whom they pursue, as the *Dolphins* do the *Flying-Fish*, either instantly to devour, or to drive them aloft†, that they may drop down into their Mouts. For, if any Author refuses the Price offer'd him for his Copy, he is sure to have his Work run down by the whole Society. If, to secure his Property, he hazards the Printing and Publishing his own Performance, the Sale of it is prevented; for such Book being sent for out of the Country, all Orders are return'd *Ignoramus*, and a Jury summon'd thereupon to suppress it. They pretend to a vast Fund

* Stationers Company.

† Alluding to Authors living in Garrets.

of Learning, but, on Enquiry, you will find it all superficial, consisting in *Title Pages*. And they generally keep some poor *Pedant* under their Thumbs, thro' whose Eyes they see, and by whose Judgment they are determined.

The *Printers* are the Tools they work their Wonders withal, without which they can perform nothing. Into these they early inculcate the Doctrine laid down in the Parable of the unjust Steward, and for every Hundred Sheets they work off, *bid them sit down quickly and write Fifty*, then commend their Integrity, and say they have done wisely. In short, it is hard to find such a ruling Thing as *Conscience* among the Fraternity. All Moral Duties must truckle under to Interest; nor will they make any Scruple of invading the Property of a Stranger, of a Neighbour, or even their own Brethren.

The *Publisher* is a Sort of Bookseller in *Miniature*, but guilty of far greater Extortion. He neither advances any Money, nor runs the least Hazard, and yet is hardly satisfied with 30 *l. per Cent. per Month*, for vending Another's Property. Upon the whole, as we are not able to discover the least Tincture of any one Virtue in above one out of Twenty *Booksellers, Printers, Letter-Printers, Plate-Printers, and Publishers*, the small Share of common Honesty to be found in more than that Number, we assign it to the *Letter-Printers*.

N. B. The foregoing is not intended to reflect upon any of the worthy Gentlemen in Trade, whom we know to be Men of Integrity.

Query 16, answer'd by *Eboracensis*.

THE Histories of all Nations resemble *March* and *April* Weather in *England*; made up of Storms and Calms, Showers and Sunshine. By the Planetary Aspects, *Mars* being Ascendant, there seems to be a Storm gathering over her Imperial Majesty's Dominions in *Italy*; another valuable Track of which being separated by it, I see a Throne erecting thereon for *Don Philip*. The ruling Passions of the most Christian King, and of the Queen Dowager of *Spain*, indicate, that the weakening the Empire, by this Means, will gain the Balance of Power in *Europe* to the Former, and an Opportunity of paving the Way to universal Monarchy, which has cost the Confederate Powers so much Blood and Treasure to prevent. The King of *Prussia* continuing in the same Mind for Life that he has been in for some Years past, might be favourably inclined for such a Scheme to succeed; as his Successor might have the kind Fate to see his own Territory the last swallow'd up, as a Province to *France*. For which Reason it behoves the States of *Genoa* to put on their considering Caps, and watch and pray (notwithstanding their putting so great Confidence on the Grand Monarch) lest greater Evil should befall them.

Query 17, answer'd by the *Inspector General*.

AS Prudence directs every Artificer to send his Manufacture to the best Market, I think no Author should hesitate a Moment about dedicating his Labours to any foreign *Mæneas* (whether Commoner, Prince, or Potentate) from whom he has Reason to expect the most Encouragement, or Reward; whether he resides in *Europe, Asia, Africa, or America*.

In the 188th *Spectator*, it is observed, "That nothing can occur

"more

more monstrous than to see Persons of *Ingenuity* address their Services and Performances to Men no Way addicted to *liberal Arts*: In which Cases the Praise on one hand, and the Patronage on the other, are equally the Objects of Ridicule. *Dedications* to ignorant Men are as absurd as any of the Speeches of *Bulfinch* in the Droll: Such an Address one is apt to translate into other Words; and when the different Parties are thoroughly consider'd, the *Panegyric* generally implies no more than if the Author should say to the Patron; *My very good Lord, you and I can never understand one another, therefore I humbly desire we may be intimate Friends for the Future.*

"The Rich may as well ask to borrow of the Poor, as the Man of Virtue and Merit hope for Addition to his Character from any but such as himself. He that commends another engages so much of his own Reputation, as he gives to that Person commended; and he that has nothing laudable in himself is not in Ability to be such a Surety. The wise *Phocion* was so sensible how dangerous it was to be touch'd with what the Multitude approv'd, that, upon a general Acclamation made when he was making an Oration, he turn'd to an intelligent Friend that stood near him, and ask'd, in a surpriz'd Manner, What slip have I made?"

Query 18, answer'd by Honeſtus Idem.

PUBLIC Stews permitted in this Nation, would doubtless be of Service to the Government by the *Revenue* arising therefrom, and would be a Means of bringing more Subjects into Life, and of preventing the dismal Effects of many lewd pernicious Practices. And, tho' they might be look'd upon as novel Schemes for the Encouragement of Debauchery, and destructive of the Protestant Religion (because not habitual as among the *Catholics*) yet if consider'd under their Train of Advantages, superior to the Disadvantages attending their Toleration, they are preferable to the present Practices, by as much as regulated Vice or Passion is superior to a State of abandon'd Out-rage: Farther considering that human Infirmitities don't admit of perfect Cure.

Query 19, answer'd by Mercator.

IT might be thought incredible for any Woman to suffer her Husband to starve in Prison, and her Children to live in a State of Servility, when it is in her Power to prevent both, had we not daily Instances of such Barbarity. And when the Wife is Aggressor, and the Husband blameless, as it sometimes happens, the Barbarity is still more shocking: And wherein our Laws are greatly defective in not providing a Remedy. And a Man's Confinement in Prison can answer no other End than to gratify the Spleen or Revenge of his Creditors, who are sometimes his Seducers, in hopes of gaining Profit by his Ruin. Reason and Equity call aloud for a Restraint upon the Wife in Cases of *Jointure*, and running her Husband in Debt. The Marriage-Institution is not herein blameable; but the Evils attending the Marriage-Settlement, made previous to the Marriage itself.

Whenever an unreasonable *Jointure* is made on a moderate Estate, and Three or Four Children happen to be provided for, Experience shews, that such Lands are commonly alienated in the second Generation. And I have often wonder'd that no better Expedient could be found out for paying Insolvent Debts than by Loss of Liberty.

Query 20, answer'd by *Casuisticus*.

HAD the great *Prelate*, spoken of, been born at *Pekin* in *China*, and continued there during his *Minority*, doubtless he would have imbib'd the *Pagan Principles*: For the Prejudice of Education being so strong, made the *Heathen Poet* observe,

*Quo semel est imbuta recens servabit odorem
Testa diu.* —

After which, *Mabomet* would have work'd no more Effect upon him in *Turkey*, than if he had gone from *England* to reside there, at the same Age for the Rest of his Life.

As no Religion can entitle a Man to Salvation but by the right Use of it, Men may miscarry by all Religions, and therein one Religion not have Preference to another; as some can't be happy living under any Government. But if we compare Religions to Governments, by which they are supported for Ends of Happiness, we shall find that the Reformed *Christian* Religion is as preferable to other Religions, as much as the *Christian* Government supporting it, is preferable to all others. As to Mr. Orator *Henley's* Piety, it is equivalent to that of his constant Hearers; of a Piece with his Modesty and Truth.

The Prize-Query answer'd by *Hermes-Trismegistus*.

To make a Modern PHYSICIAN.

Hippocrates, *Calomel*, *Balsam Capivi*, *Electuarium Mithridatum*, *Album Grecum*, αλευμ γρηχυμ, *Theriaca Andromachi*!

℞ A good likely young Fellow, Valet de Chambre to some Gentleman who has travell'd Abroad; make him Member of a Druggists and Apothecaries Club in London; where let him endeavour to get by Heart the Names of the Principal Drugs, Medicines, Diseases, and Technical Terms.

When he is well versed in the Exercise of the said Terms, and has got the Greek Alphabet by Heart, with Twelve select Lines of the *Schola Salernitana* (to avoid breaking *Priscian's* Head) he must suffer himself to be suspended naked in an *Hippocrates's* Sleeve, fill'd with Elixir Salutis up to his Chin, which being filtrated, and only himself and the Faeces left, he must repeat, without Hesitation, all the said Names and Technical Terms, the whole Society shall think proper, and also the Greek Alphabet, before he is suffer'd to come out: And for every Greek Letter, or Technical Term he misses perfectly pronouncing, he shall receive a smart Lick thro' the Flannel on his Posteriors, with a large long Liquorice Stick, and be obliged to repeat the same till he says his Lesson perfect, to the Satisfaction of the Audience.

Then he and the Faeces must be suddenly tumbled out together (by cutting open the Bottom of the Bag) upon a Blanket, held underneath by four Lusty Druggists or Apothecaries, who are to toss him, together with the Faeces, till he begins to grow Sick. Then, let him be wrapt up in dry Flannel, put into the Shell of a Coffin, (cautioning him against dealing Death) and carried to *Haddock's* Bagnio, near *Charing Cross*, to be there sweated, and his Skin well mundified; where he may, if he pleases, sleep for that Night. This done, he must be dress'd, and carried from thence in a Chair to *Monmouth Street*, and *Middle Row*, *Holborn*, to be equipp'd with a Second-hand Suit of Black, a Tye Wigg, large Snuff-Box, and short small Sword. Thence he is to be carried (by the same Chairmen) to *Batson's*, and the Chairmen to receive his left off Gleaths for their Fare,

A Diploma being next procur'd him from Edinburgh, Glasgow, or Leyden, he is to attend on the said Society of Druggists and Apothecaries, at their next Meeting, and deliver the same, kneeling on a Cushion, upon the Table, to their President for the Time being; who, after reading it aloud! Dubs him Doctor, by waving a Gold-headed Cane three Times over his Head, and then delivers it into his Hands for a Present. At which Time, all the Members standing up, una voce, must cry out; Long live the noble Esculapius! and the President repeat, by whom the most obstinate and inveterate Disorders, whether acute or chronic, shall quit their latent Recesses, tremble at his sagacious Nod, and fly before his awful Fiat. — Proceed to prosper — feel the Ladies Pulses, dive into Family-Secrets, insinuate your Infallibility, augment your Prescriptions, evacuate our Shops, and rarify the People.

— epiferque per Orbem

Dicor. —

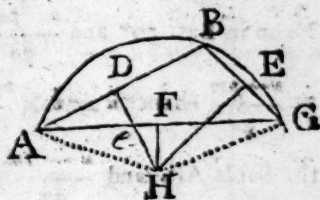
N. B. The Fees to be paid down on this Admission are Twenty Guineas to the Society, besides the whole Expence of that Meeting, in an elegant Supper and Treat; for which the Doctor shall be allow'd to visit at each of the Member's Shops gratis, and ask as many Questions about the Names and Nature of Drugs, and Medicines, as he chuses — and have ocular Demonstration of the same — Likewise shall have Liberty to feel Mamma's or Miss's Pulse, to bring his Hand in among the Ladies, for so small a Present as a Diamond Ring — and thereby making himself acquainted with the Female Anatomy and Disorders, he may soon after commence Man-Midwife if he pleases.

Answers to the Questions in last Year's Palladium.

I. Question 29, answer'd by Nichol. Dixon of Blackwel.

Drawing the Scheme annex'd, put $a = HF = 10$; $b = HE = 20$; $c = HD = 30$ Poles per Qu. Let $x = AD$; $z = AF$; $y = GE$, per Fig. Now (20. c. 3.) $\angle AGB = \angle AHD$, whose cos. is

$\frac{c}{\sqrt{x^2 + c^2}}$. By Prob. 7. p. 96. of



Mr. Emerson's incomparable Book of Trigonometry, cos. $\angle AGB$ is

$\frac{yy + zz - xx}{2yz}$ Th. $\frac{yy + zz - xx}{2yz} = \frac{c}{\sqrt{xx + cc}}$. By 47 E. 1.

$xx + aa = xx + cc$; and $zz + aa = yy + bb$: from which 3 Equat. (x and y being exterminated) we have $z^6 - 2500z^4 + 1430000z^2 + 25000000 = 0$, from whence $z = 30.4174$; $x = 11.19412$; and $y = 25$; all which doubled will be 60.8348; 22.38824; and 50, the Length of each Fence. Whence the Area will be found 3 A. 1 R. 11 3 Perches. Mr. Charles Smith of Rugby, elegantly solved the same; as did Anagramensis, Holy in Heart, Ebor. Also Mr. Harland Wise, and Mr. G. Burges's went pretty near the Mark!

24 *The GENTLEMAN and LADY'S*

II. Quest. 30, answer'd by Mr. *Pb. Williams*, near *Sbrensbury*



Put $a =$ Top-Diameter $= 4$ Inches; $b =$ Bottom-Diam. $= 3$ Inches, and $h =$ Height $= 5$ Inches

Then, by *Ladies Diary* 1744, pag. 10, $c^2 = b^2 + ah$

$$\times \frac{.7854 ah}{3 \times a - b} = \text{Solidity Greater Hoof ADB, or of the}$$

$$\text{Liquor drank at each Time; 9 Times which Quantity} \\ = 9 \times 16 - 3 \sqrt{12} \times 5.236 = 264.25725, \&c$$

Inches, or 9.1517 Pints; being about Nine Pints and half a Gill.

Mr. *Charles Smith* solves it in the same elegant Manner, and brings out the very same Numbers.

Nichol Dixon's Answer.

Put $e = .7854$, $h = 5$ the Depth; $B = 4$, the Top Diam. $b = 3$ the Bot. Diam. Then by the Theorem of *Merones* for solving 240

pag. 11. *Ladies Diary*, 1744, $\frac{e h B}{B - b} \times \frac{B \times \sqrt{Bb} - bb}{3} = 29,351444$

$=$ Wine drank at one Time; which being nine Times taken is 264.161 Inches, or, 1,1435 Gall. drank in all.

Mr. *Francis King*, Mr. *William Spicer*, Mr. *W. Bevil*, Mr. *Randle*, and many others solv'd the same.

III. Question 31, answer'd by Mr. *Charles Smith*.

Put m and n for the Sine and Cosine of $23^\circ 28' 30''$ the Declinat. on June 9, (see *Palladium*, 1751, pag. 56.) s and c for the Sine and Cos. of Lat. 50° ; p and q for those of the Lat. 60° , and $u =$ Sine Sun's Altitude in each Lat. Then, by *Spherics* $\frac{u - sm}{cn} = \text{Cos. Hour} < \text{fr.}$

$$\text{Noon in Lat. } 50^\circ \text{ and } \frac{u - pm}{qn} = \text{Cos. of the same in Lat. } 60^\circ \therefore \frac{u - sm}{cn}$$

$$= \frac{u - pm}{qn}; \text{ hence } u = m \times \frac{pc - qs}{c - q} = .4844437 \text{ Sine of } 28^\circ 58' 33'', 66$$

$$\text{the Sun's Alt. and } \frac{u - sm}{qn} = .3040957 = \text{Cos. } 72^\circ 17' 47'' = 4 \text{ h.}$$

49 m. 11 Sec. 8th. in the Afternoon, the Time required.

Mr. *Cowper's*, the Proposer's, Solution is thus:

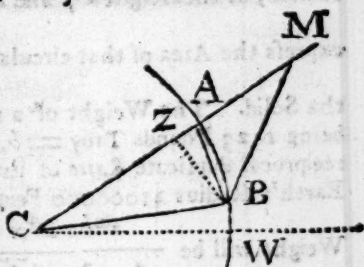
Put a and b for the Sine and Cos. of 50° , s and c , the Sine and Cos. 60° ; d and f , the Sine and Cos. $23^\circ 29'$; and $z =$ Cos. Hour fr. Noon. Then, by a known Theorem $bfz + ad = \text{Cos. Sun's Altitude in Lat. } 50^\circ$; and $cfz + sd = \text{same in Lat. } 60^\circ$, whence $z = \frac{sd - ad}{bf - cf} = .304217$ the Cos. $72^\circ 17' 21'' = 4 \text{ h. } 49 \text{ m. } 9 \text{ s.}$ the Time required. This confirms the Truth of Mr. *Smith's* Solution.

Mr. *Roger Widger*, Mr. *Harland Wid*, Mr. *William Spicer*, and several others solved the same.

IV. Quest.

IV. Question 32, answer'd by Mr. Smith.

First, by Trigonem. (having $OB = OA = 40$ Miles, and the Angle $BOA = 22^\circ 30'$ given) find $Bz = 16,307336 = c$, and $Az = 3,04482 = d$; and let $x = MA$ the Distance sail'd by A, continuing at the Rate of four Miles per Hour, $x + d = Mz$, then as $4 : 5 :: x : BM = r$ x = dist. sail'd by B, in the same Time, at the Rate



of five Miles per Hour ($r = 1,25$) and per 47.61 $MB^2 = Mz^2 + Bz^2$, i. e. $r^2 x^2 + x + d^2 + c^2$, from which Equation $x = MA = 26,915141$, and $x = BM = 33,643926$ Miles; whence the Rest easily follow; viz. $AM = 26,91514$, $OM = 66,91514$ Miles, sail'd by the Ship A; $OB + BM = 73,643926$ Miles, sail'd by B from Parting till Meeting again with A. Also from A to B at Morning the Course NNW. and fr. B to A, at that Time, SSE. And fr. B to M SSW $6^\circ 41' W$.

The same answer'd by Nichol. Dixon.

In Triangle OAB, is given $OB = OA = 40$; $\angle BOA = 22^\circ 30'$, from whence $\angle s$ OBA and OAB are found, each $78^\circ 45'$. Then $S. \angle OBA : OA :: S. \text{Angle } BOA : BA = 15,6$ Miles, the Dist. of the Ships A and B, at Day-break; when their respective Bearings, viz. from A to B. and B to A, will be exactly NNW and SSE. Again, in Triangle ABM, BA is given, and Angle BAM, and the Proportion of AM to BM, when the Angles are found thus. As Log. 5 : S Angle BAM $= 101^\circ 15' ::$ Log. 4 : S Angle ABM $= 51^\circ 41'$; whence Angle AMB $= 27^\circ 4'$. Now, AB being given, and all the Angles, BM will be found 33,64 Miles, the fewest possible, that can be sail'd by the Ship B, whose Course is SSW $6^\circ 41' W$ to join the Ship A. And the Ship A will have sail'd 26,91 Miles, and Ship B 73,64 Miles from Parting to Meeting again. W. W. R.

Mr. Harland Wid solv'd it the same, so did Mr. William Dent, Mr. William Bevil (very elegantly and concisely) and a great many others.

V. Question 33, answer'd by Mr. Randles of Wem.

For 32 r. 33 Men (which I'm inform'd is a Press-Error) Let $x =$ Men in Col. A's Regiment. Then $x - 33 =$ Col. B's Men, $x - 95$, Col. C's Men; $x - 200$, Col. D's Men: But $x - 33 + x - 95 + x - 200 + x = 4600$ Men; whence $x = 1232$ Col. A's Men; and 1199 Col. B's, 1137 Col. C's, and 1032 Col. D's Men.

Mr. Harland Wid answers it exactly the same.

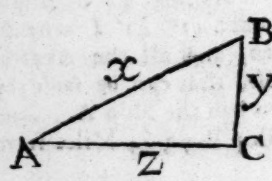
VI. Question 34, answer'd by the Proposer, only.

The Radius of the Solid's Base is 35,35 Feet, for which put a ; and

If x be a variable Distance from the Earth's Surface $\frac{a^2}{a + x}$ will, by the Nature of the Hyperbola, express the Radius of the Conoid's circular Section,

Section, at the Height x ; and c being put for $3.14159 \times \frac{ca^4}{a+x)^2}$ will express the Area of that circular Section, and $\frac{ca^4x}{a+x)^2}$ the Fluxion of the Solid. The Weight of a solid Foot of Gold at the Earth's Surface being 1523 Pounds Troy $= b$, and the Weight of Matter being in the reciprocal duplicate Ratio of its Distance from the Earth's Centre, and Earth's Radius 21000000 Feet $= r$, the Fluxion of the whole Solid's Weight will be $\frac{r^2 b c a^4 x}{a+x)^2 \times r+x)^2}$. But the Fraction $\frac{1}{a+x)^2 \times r+x)^2}$ is $= \frac{1}{r-a)^2} \times \frac{1}{a+x)^2} - \frac{2}{r-a)^3} \times \frac{1}{a+x} \times \frac{1}{a-r)^2} \times \frac{1}{r+x)^2} - \frac{2}{a-r)^3} \times \frac{1}{r+x}$; each of which being multiply'd by $r^2 b c a^4 x$, and the Fluent taken and well corrected, will very fairly become, when x is infinite, $r^2 b c a^4 \times \frac{1}{r-a)^2} \times \frac{r+a}{ar} - \frac{1}{r-a)^3} \times \text{Hyp. Log. } \frac{r^2}{a^2}$ the required Weight of the Conoid.

VII. Question 35 answer'd by Mr. William Bevil of Harpswell.

 Put first, $x+y+z = a = 100$; Second, $xyz = b = 30000$; by Quest. ; and Third, $z^2 + y^2 = x^2$ per 47. E. I. By 2d. $yz = \frac{b}{x}$, and $y = \frac{b}{zx} = a - x - z$ by 1st Equation; whence $z^2 - a - x \times z = \frac{-b}{x}$, and $z = \frac{\sqrt{a^2 - x^2 - \frac{b}{x}}}{2} + \frac{a-x}{2}$. But $2yz = \frac{2b}{x}$, from Above, which added to the 3d Equation, we have $z^2 + 2yz + yy = x^2 + \frac{2b}{x}$, and thence $z+y = \sqrt{x^2 + \frac{2b}{x}} = a - x$, by the 1st Equation; hence $x^2 - \frac{a}{2}x = \frac{-b}{a}$, and $x = \frac{a}{4} \pm \sqrt{\frac{a^2}{16} - \frac{b}{a}} = 43.027756$, whence z (from above) $= 39.174189$ (or 17.798055) $y = 17.798055$ (or 39.174189) Q. E. I.

The same answer'd by *Nichol. Dixon of Blackwel.*

Steps		
Put	1	$x+y+z=s$
then	2	$xyz=p$
7. E. 1.	3	$x^2=y^2+z^2$
$2 \div x$	4	$\frac{p}{x}=yz$
4×2	5	$\frac{2p}{x}=2yz$
$5 + 3$	6	$x^2 + \frac{2p}{x} = y^2 + 2yz + z^2$
$1 - x$	7	$s - x = y + z$
7×2	8	$s^2 - 2sx + x^2 = yy + 2yz + zz$
$8 = 6$	9	$s^2 - 2sx + x^2 = x^2 + \frac{2p}{x}$
9 reduc'd	10	$x^2 - \frac{s}{2}x = -\frac{p}{s}$ whence $x = 43.027$;

And thence $y = 17.8$, $z = 39.173$. and the Content 2 A. 28,6 P.

Anagramenſis, Holy in Heart, answer'd it the same ; as did Mr. *W. Dent*, Mr. *Fra. King*, *Amicus*, *T. T—d*, Mr. *W. Spicer*, Mr. *Widger*, and Mr. *Harland Wid.*

VII. Quest. 36 answered by the Proposer, Mr. *Chr. Powle*, of *Hereford*.

Put $d = AB$, $a = OB$, $h = BC$, $y = OD$.

Then per sim. Triangles $a : h :: y : \frac{hy}{a} = DC$. And putting $S =$ the variable Area Dmr ; $\frac{hy}{a} \times S = \dot{z}$ the Fluxion of the indefinite

Solid $CDmr$. Adding $\frac{hy\dot{S}}{a}$ on both

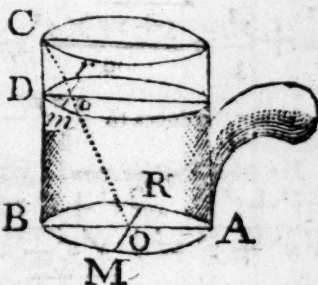
Sides, $\frac{hyS}{a} + \frac{hy\dot{S}}{a} = \dot{z} + \frac{hy\dot{S}}{a}$;

But $\dot{S} = 2y\sqrt{dy-yy}$ by Property of

the Circle : Consequently $\frac{hyS}{a} + \frac{hy\dot{S}}{a}$

$= \dot{z} + \frac{hy}{a} \times 2y\sqrt{dy-yy}$; whose Fluent is $\frac{hyS}{a} = z -$

$\frac{hy}{3a} \times \overline{dy}^{\frac{3}{2}} + \frac{hdS}{2}$; Th. $\frac{hyS}{a} + \frac{2h}{3a} \times \overline{ay-y^2}^{\frac{3}{2}} - \frac{hdS}{2a} = z$.



$$= z. \text{ When } y \text{ becomes } = a, hS + \frac{2ha^{\frac{1}{2}}}{3} \times d - a^{\frac{3}{2}} - \frac{hdS}{2a} = z.$$

In the present Case (because $a = \frac{d}{2}$) $\frac{hd^2}{6} = z = 16$ Inches, the lesser Hoof; and proportioning the Money, He that drank *first* must pay 14.18 Pence, and the latter drinking 16 Inches, must pay 3.819 Pence. *Nichol. Dixon* solv'd it exactly in the same Numbers, from *Prop. III. p. 119. Appendix to Stone's Fluxions.*

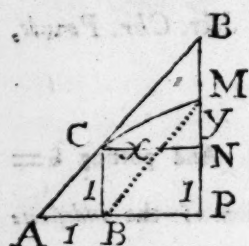
Mr. William Spicer solves it thus:

Put $D = \text{Diam.}$ $b = \text{Alt.}$ $p = ,7854$. Then $\frac{6D^2p-1}{6} \times D^2b = 59.3984$ Cubic Inches, the first Man drank: Also $\frac{bD^2}{6} = 16$ Inches, the second Man drank. Whence

$$\begin{array}{l} \text{First} \left\{ \text{pays} \left\{ \begin{array}{l} 1 \text{ s. } 2 \text{ d. } 0 \text{ q. } \frac{944}{1309} \\ 0 \quad 3 \quad 3 \quad \frac{465}{1309} \end{array} \right. \right. \end{array}$$

Mr. Cba. Mason Junior, Mr. Fra. King, Mr. Harland Wid, Mr. Bevil, Epigramensis, Holy in Heart, Eber. Mr. Randles of Wem, Shropshire, and a great many others elegantly solv'd the same.

IX. Quest. 37. answer'd by Mr. Powle, the Proposer.



$$1+x=AP=PE=BM; 1+y=PM.$$

$$\text{Th. per 47 E. 1. } x^2 + 1 + y^2 = 1 + x^2 \text{ i.e.}$$

$$BM^2 = MP^2 + BP^2. \text{ Th. } 2y + y^2 = 2x$$

is the Curve's Equation, and its Rectification and Quadrature as follows.

For the Quadrature. $\dot{x} = \dot{y} + \dot{y}y$. Th.

$$y\dot{x} = y\dot{y} + y^2\dot{y} = \dot{A}, \text{ whose Fluent is}$$

$$\frac{y^2}{2} + \frac{y^3}{3} \text{ or } \frac{3+2y \times y^2}{6} = A \text{ the Area; which, by the Curve's}$$

$$\text{Equation, reduces to } \frac{2xy}{3} - \frac{y^2}{6} \text{ or } \frac{4x-y \times y}{6}.$$

For the Rectification. $\dot{x} = \dot{y} + \dot{y}y$ as above; Th. $\dot{x}^2 = \dot{y}^2 + 2y\dot{y}^2 + y^2\dot{y}^2$, and $\dot{x}^2 + \dot{y}^2 = 2\dot{y}^2 + 2y\dot{y}^2 + y^2\dot{y}^2 = \dot{C}^2$, whence

$$\sqrt{x^2 + y^2} = y \sqrt{y^2 + 2y + 2} = \dot{C}, \text{ whose Fluent, when corrected, is}$$

$$y \sqrt{\frac{1+x}{2}} + \frac{\text{Tab. Log. } \sqrt{2+2x+1+y} \times R}{2} - 1$$

$$\sqrt{\frac{1}{2}} \text{ min. } \frac{\text{Tab. Log. } \sqrt{2+1} \times R}{2} = C.$$

Mr. Harland Wid puts a equal 20, x equal any Abscissa, and y its corresponding Ordinate: Then the Equation of the Curve will be

$$\sqrt{aa+2ax}-a=y; \text{ Its Area=Fluent of } \dot{x}\sqrt{aa+2ax}-a\dot{x}=\dot{x}a+x\sqrt{aa+2ax}-a\dot{x}; \text{ and Length equal Fluent of } \dot{x}\sqrt{2a+2x}=\frac{a\phi}{4}+\sqrt{\frac{2aa+6ax+4x^2}{2}} \text{ when } \phi \text{ is equal}$$

$$4.605 \times \text{Log. } \sqrt{a+x}+\sqrt{2a+x}.$$

X. Question 38. answer'd by Mr. Charles Smith of Rugby.

$$\text{Given } \left\{ \begin{array}{l} x^3z^2+z^3x^2=196020=s \\ x^3z+z^3x=19998=2c \end{array} \right\} \therefore \left\{ \begin{array}{l} xz^2+xz^2=\frac{s}{xz} \\ x^2+z^2=\frac{2c}{xz} \end{array} \right\}$$

substitute $a+e$ for x , and $a-e$ for z , then $(a+e)^2 \times a-e + (a-e)^2 \times a+e = \frac{s}{a^2-e^2}$, and $2a^2+2e^2 = \frac{2e}{a^2-e^2}$; Or, $2a^5-4a^3e^2$

$+2ae^4=s$, and $2a^4-2e^4=2c$; from which last Equation, $e^4=a^4-c$, and $e^2=\sqrt{a^4-c}$, and by substituting these Values of e^4 and e^2 in the other, we have $4a^5-4a^3\sqrt{a^4-c}-2ca=s$; which reduced $a^5-255.025a^2-4999.5a=24502.5$, where a is determin'd = 10, whence $e=1$, and $a+e=x=11$, also $a-e=z=9$ Shillings spent. Q. E. F.

Mr. William Bevil, Writing Master, and Teacher of Mathematics, at Harpswell, near Gainsborough, Lincolnshire, solves the foregoing thus:

$$\text{Put } a=xz, e=x+z, \text{ then } a^2e=x^3x^2+z^3x^2=c, \text{ and } e=\frac{c}{a^2}, e^2=x^2+2xz+z^2; \text{ but } 2a=2xz, \text{ therefore } e^2-2a=x^2+z^2, \text{ and } e^2-2a \times a=x^3z+z^3x=d, e^2=\frac{d+2a}{a},$$

which give this Equation $2a^5+da^3-c^2$; solv'd $a=99$, and $e=20$; whence $x=9$, and $z=11$ Shillings spent. Q. E. F.

N. B. By proper Substitution great Difficulties are overcome, in Algebraic Solutions to these Kind of Questions, which few Authors have observ'd.

Mr. Harland Wid solv'd the same, and several others.

Mr. G. Burges, on Occasion of solving this Question, has made an Improvement in solving all Mr. Perryam's Exponentials.

XI. Question 39 answer'd by Mr. T. Cowper.

Put x = Sine Hour from Six, x = Sine, y = Cos. Lat. Then by the Analogy for finding the Sun's Altitude when he is in the Equinoctial, as $1 : y :: s : sy = x$ by Question. But $\frac{x}{y} = s$ = Tangent of $35^{\circ} 15' 51''$. the Latitude required.

Mr. William Spicer solves it exactly the same, in the same Symbols, as likewise does Mr. W. Bewil of Harpswell, Mr. Widger, Mr. Wid, and several others.

XII. Question 40 answer'd by Mr. Harland Wid.

Place	1	lies in	14°	35' So.	Longde	00°	00'
	2		9	25 N.		57	25 East
	3		56	4 N.		116	11 East
	4		55	4 N.		116	11 West
	5		9	2 N.		57	25 West.

The PRIZE-QUESTION, answer'd by Halleienfis.

THE Advantages of the Art of finding the Longitude at Sea, are too evident to need any Arguments to prove them.

Experience shews the Impracticability of all other Methods, but that derived from a perfect Knowledge of the Moon's Motion.

A five or six Foot Telescope (which requires only a little Practice to manage) will shew the Appulses, or Occultations of the fix'd Stars by the Moon, on Ship-board, in moderate Weather; especially in the first and last Quarters of the Moon's Age; when her weaker Light does not so much efface that of the Stars. Whereas the Eclipses of the Satellites of Jupiter, how proper soever for Geographical Purposes, are absolutely unfit at Sea; as requiring Telescopes of greater Length than can well be directed in the rowling Motion of a Ship in the Ocean.

The Motion of the Moon being so swift as to afford scarce ever less than two Minutes for each Degree of Longitude, and sometimes two and a half, 'tis evident, that were the true Time of the Appulse or Occultation of a fix'd Star, in any known Meridian, can be perfectly predicted, and by comparing therewith the Time observ'd on board a Ship at Sea, we may safely conclude how much the Ship is to the Eastward or Westward of the Meridian, departed from. Collating the Moon's Places by Calculation, from Dr. Halley's Tables, with those observed for a whole Period of the Lunar Inequalities, perform'd in 223 Lunations (viz. 18 Years, and 11 Days) it will be found by noting the several regular Errors, in a Table, that not only the Eclipses of the Sun and Moon, but most of the Phænomena of the Moon's Motion, will return nearly the same in every successive Lunar Period, under the like Circumstance of Distances from the Sun and Apogeeon. So that whatever Error, or Difference you find, in any former Lunar Period, between the Places of Calculation, and Places observ'd, or other Phænomena of the Moon's Motion, by allowing the same, in any successive Lunar Period, in the like Circumstance, the Moon's true Place, or Phænomena, may be always duly assign'd by

Calcu-

Calculation: According to the regular Irregularities of the Moon's Theory.

If therefore, at Sea, you observe nicely the Time of an Occultation or close Application of a Star to the Moon, and can find a correspondent Observation, about the same mean Anomaly and Distance of the Moon from the Sun (among any Collection of correct Observations made) especially near the same Time of the Year, and, above all, after the aforesaid Period of 18 Years and 11 Days, you may, without sensible Error, from thence pronounce in what Meridian your *Ship* is: Taking Care, in the operose Calculation to commit no Mistake. And, notwithstanding the Direction of the Moon, always take Care to omit none of the usual Precautions to preserve a Ship coming near Land.

"The Proposer's *opinionative* Answer (as he calls it) is by the Means of Spring Clocks nicely tim'd and corrected; that they might correct each other by taking the mean Time amongst them all, which would keep up the true Time very near for a great Length of Time, and which he takes to be the best Method of finding the Longitude at all Times and Places; when proper Observations can be made by Sun or Stars, to find the true Time at Sea." *W. Sutton.*

N. B. The above Method is the *jesuitical* one, as published by the Jesuits some Time ago, in the News Papers. But all Pendulums and Spring Clocks whatsoever measuring Time made of metallic Bodies, must vary by Expansion or Condensation of Heat and Cold (lengthening or shortening thereby) and so cannot be depended upon.

Answers to the Paradoxes in the Year's Palladium.

I. Paradox an EPHEMERIS. II. Paradox a SHADOW.

I. Paradox, answer'd by Hudibras.

An EPHEMERIS and *Almanack*,
Are different as *Red* and *BLACK*.
The *Last* is no EPHEMERIS,
Nor *FIRST* the *Last* in *Terminis*.

II. Paradox, answer'd by Milo.

If *Lucinda's* dear SHADOW our Hearts can surprize!
What *Force* to command has the Pow'r of her Eyes?

The Solution to the VIth Question (see *Palladium*, pag. 34. 1750) improv'd. By *Xenon*.

Let H, M, and S, represent the Hour, Minute, and Second Hands of a Clock or Watch, then 1, H, 12, M, and 720, S, will be the Revolutions respectively moved by H, M, and S, in 12 Hours. And 11, M and H, 708, S, and M, 719, S and H. Revolutions Difference mov'd by those Hands in 12 Hours.

Say as 11 Rev. Diff. by M and H. 12 h. :: 1 Rev. Diff. : $\frac{12}{11}$ h.
= 1 h. 5 m. $\frac{5}{11}$ when M and H are next conjoin'd.

And

And 708, S and M: 12 h. :: 1 R: $\frac{12}{708}$ h. = 1 m. 1 s. $\frac{12}{708}$, when S & M, are next conjoin'd.

719, S and H: 12 h. :: 1 R: $\frac{12}{719}$ = 1 m. os. $\frac{60}{719}$, when S and H, are next conjoin'd.

Because the Conjunctions of the two lowest Indices H and M, happen at $1 \times \frac{12}{11}$, $2 \times \frac{12}{11}$, $3 \times \frac{12}{11}$ h. &c. the Conjunctions of the other

Indices, happening at $\frac{12}{708}$ h & $\frac{12}{719}$ h. can never happen 'till $11 \times \frac{12}{11}$ = 12 Hours; because being divided continually by those least Times of Conjunction, no whole Number of Times will result 'till then, when 708 and 719 come out for the exact whole Numbers of those Times. And the same is to be observ'd of the mean Motions of Bodies revolving in circular Orbits about the same Centre, with Respect to the Possibility of their exact Conjunction, Opposition, or any required Aspect.

When all the three Indices are farthest asunder, it is evident, that the Sum of the Differences of their Distances from one another, is the least. To determine which it must be discover'd in which of the Revolutions the swiftest Movement S. is first nearly $\frac{1}{3}$ of a Revolution from H the slowest Movement; H and M being $\frac{1}{3}$

of a Revolution asunder, happening always in $\frac{4}{11}$ h. $\times b \times \frac{12}{11}$

= $\frac{4 + b12}{11}$ h. Or in $\frac{8}{11}$ h. $+ b \times \frac{12}{11} = \frac{8 + b12}{11}$ h. b being a

ny whole Number of Revolutions from 1 to 11. By the last Expression b will be found equal 2, when the Dist. mov'd between S and M = $\frac{1}{3}$ (i. e. they are $\frac{1}{3}$ asunder) at the same Time the Distance mov'd between S and H equal $\frac{40}{132}$ (first nearly a Third) being only $\frac{4}{132}$ of a Revolution, short of $\frac{1}{3}$ or $\frac{44}{132}$: (For 12 h.: 719 Rev. Diff. betw.

S and H :: $\frac{32}{11}$ h. : $\frac{40}{132}$ above whole Rev.

Say 719 Rev. mov'd bet. S and H: 12 h. :: $\frac{4}{132}$ Rev. betw. S and H (wanting of $\frac{1}{3}$): $\frac{4}{11 \times 719}$ h. to be added to $\frac{32}{11}$ h. which = $\frac{2092}{719}$

= 2 h. 54 h. 34 s. $\frac{394}{719}$, the least Time when all the Hands are first nearly farthest asunder. Therefore if a Circle is divided into 3 Times 719 Parts = 2157 Parts, then, by Proportion, H will move 523 of those Parts, M, 6276 = $2 \frac{1962}{2157}$, and S, 376560 = $174 \frac{1242}{2157}$, whence,

718 H to M, 719 H to S, 720 M to S, where the Sum of the Differences = 4 only; and H to S (the slowest and swiftest Hands) is $\frac{2}{3}$ of a Rev.; which H to M and M to S differ but by $\frac{1}{719}$; and is the only true Solution.

Mr. Flitton finds the Proportion of the Distances exactly the same; but makes the Time 9 h. 5 m. $\frac{305}{719}$, which is not the least Time required; but is deduc'd from $\frac{4+612}{11}$ (when S and M are One third asunder) where $b=8$; after which Time S and H are likewise $\frac{92}{132}$ of a Revolution distant, i. e. $\frac{4}{132}$ beyond $\frac{88}{132}$, or Two thirds of a Revolution, and therefore $\frac{4}{11 \times 719}$ must be deducted from $\frac{100}{11}$ which = $\frac{71896}{7909} = 9 \text{ h. } 5 \text{ m. } \frac{305}{719}$ as above.

When $b=3$, then $\frac{8+3 \times 12}{11} = \frac{44}{11} = 4$ Hours, when M and S are together, and H $\frac{2}{3}$ Rev. distant. So likewise when $b=7$, then $\frac{4+7 \times 12}{11} = \frac{88}{11} = 8$ h. when M and S are together and H $\frac{2}{3}$ Rev. off.

At $\frac{4}{11}$ h. the Time when H and M are first $\frac{1}{3}$ Rev. asunder, S and H will have mov'd $\frac{26}{33}$ asunder, i. e. $\frac{4}{33}$ above $\frac{2}{3}$ or $\frac{22}{33}$ Rev; which $\frac{4}{33}$ Rev. answers to $\frac{48}{33 \times 19}$ h. to be deducted from $\frac{4}{11}$ h. which will be = $\frac{2860}{7909}$ h. = 21 m. 41 s. $\frac{6391}{7909}$ when the three Hands are first far asunder; for then H to M = 715 Parts; S to H 719 Parts; and M to S 723 Parts; whose Sum of Differences = 16.

Mr. Flitton enquires for the Expression, in a just Surd, of an Area of a plain Triangle, whose Sides are $\sqrt{85}$, $\sqrt{61}$, and $\sqrt{41}$?

REMARKS on a last Year's Solution.

Miss Sophia Western of Hull corrects her last Solution to the Question of the Cassinian Ellipsis. See Fig. p. 32. of the Palladium, 1751.

$7xx \times 7bb \} x = 9aa \times aa - bb$, where $x = 609.84$ and $-34aa \}$
 $x = 24.695 =$ half Length of the Caik, and the whole Length 49.39 &c. Let PC now = x ; PM = $\sqrt{y}$; $c = 3.1416$; $FE^2 = 72.08 = d$; FC = z , and we shall have FM $\times$ SM
 $(= \sqrt{y+x-z} \times \sqrt{y+x+z}) = d$, and $y = \sqrt{aa + 4nnxx}$
C -xx

— $xa - an$, and cyx the Fluxion of the Solid $= x \sqrt{dd + 4nnx}$
 $- cxx - cnnx$, whose Fluent, when $x = BC$, will be found to be
 27579 = Cont. half the Cask, and the whole Content 55158, nearly
 agreeing with the ingenious Proposer's Numbers (See *Ladies Diary*
 1751, p. 26, 27.) he making the Content of the whole Cask 55124.

This young Lady mist of the *true Fluent*, last Year, or Her's had
 been the *only* true Solution that came to Light, after Mr. Baker's only
 true Solution was inserted in the said *Diary*.

We agree with this *excellent young Lady*, that the Velocity of
 freely falling Bodies, at, or near the Earth's Surface, are as the
 $\sqrt{\text{Distances descended}}$; but, in Bodies falling *prostrate* at her Feet, or
 by cylindrical Bodies falling at one End, while they are interrupted falling
 freely by the other End fixed, or sliding backward, we think the Velo-
 city of their falling is something *different*, and govern'd by different
Laws of Attraction.

Lad. Diary, 1752. p. 46. l. 27. read $-\sqrt{4a^2x^2}$ in the Denom. =
 $= a$, for 3a; l. 29. r. determin'd; 30. blot whereby; l. 22. when $x = a$,
 for $x = 0$; l. 23. taking the Fluxion of each connected variable Quantity,
 and then finding the Values of the whole, by making the simple and va-
 riable Quantity = known. P. 47. l. 16. at $0^\circ \pm 1^\circ$ read (because

$\frac{3}{0} - \frac{3}{0}$, Infinite — Infinite, can't be determin'd, yet $\frac{1-x}{1-x} = 1$, when
 $x = 1$.)

Mr. *Abraham de Moivre's* Doctrine of Annuities, corrected and im-
 prov'd by *Devonienfis*, to be printed hereafter, when Room will permit.

DEVONIENSIS gives us a curious *Demonstration* of the Truth, from an
 Error in Mr. *Abraham de Moivre's* Doctrine of Annuities; and observes,
 "That if Mr. *de Moivre's* Problem for valuing a single Life were cor-
 rected, all the rest in his last Edition, where the Value of a single
 Life of any Age is previously suppos'd to be known, *would be right*;
 "and that his Method is *excellent*, and infinitely preferable to Mr. *Simp-*
son's immethodical, obscure, and perplex'd Jargon; which shews itself
 "here, as well as in his other Writings. And that tho' Truth lies hid
 "under Mr. *Simpson's* Crowd of Symbols (as Mr. *de Moivre* calls them)
 "he might much better, after shewing how to find the Value of a
 "single Life, have taken that as known (as Mr. *de Moivre* has done)
 "and not have deduc'd every Theorem, *ab origine*, when his former
 "would have serv'd as *Lemmata*. This would have sav'd Mr. *Simp-*
son and his Reader the Trouble of going thro' a Labyrinth of Alge-
 braic Tautology, when the plain Road lay before him." *Devonienfis*.

Farther Improvement on our present *Doctrines of Annuities*.

Devonienfis aforesaid takes Notice, that he has got together *Ma-*
terials for new Tables of the Probabilities of Life from the *Parish* Regi-
 sters; and designs to compare the *London, Edinburgh, Northampton,*
and Breslaw Tables, of the Decrements and Expectations of Life, to-
 gether with his *own* Tables from the said Registers, in order that they
 may be the more perfect. And observes, that he has one Advantage
 not to be had from any of the publish'd Bills of Mortality; *viz.* hav-
 ing Observations for every Year of Life; whereas those other Bills exhi-
 bit only the Number that die under Two Years of Age, and between Five
 and Ten, Ten and Twenty &c.; the Number of those dying at the inter-
 mediate Ages being only guess'd at, and generally dispos'd of so as to make

The *Decrements* progression, and also to change that Progression for the next Ten Years, according to the Number dying in that Time. But for any Thing that appears by the said Bills, there may be a remarkable Change of the *Decrements* at the first Four or Five, or other *intermediate* Years; and one *Error* herein (*not to be avoided by those who have none but the public Bills for their Guide*) will influence the Expectancy of Life at several other Ages. For the Number of Persons living at a given Age, may be reduc'd to half that Number sooner or later than by those Tables; and consequently the Years in Expectancy, according to such Tables, may be, and often are, *falsly* set down. *Devonienfis.*

The CABINET.

The Twelve Months WISDOM;

Prescribed to a BABLER.

JANUARY.

Pythagoras of old, 'tis said,
In the *Greek* Language deeply read,
Intent to cultivate the Mind,
Septennial Silence first enjoin'd;
Wisdom, says he, in *Silence* lies,
Still Fools are negatively wise.

FEBRUARY.

We Moderns should observe this *Rule*,
'Twou'd shelter many a prating Fool!
You smile, I see, and whisper sly,
"The *Rule* you give you should apply."
I own the Language, Sir, is true;
But who can *bold* that thinks of you?

MARCH.

Yet some of Penetration deep,
A Seven Years Silence *somewhere* keep,
With folded Arms, and Discontent,
Seem to be Props of Government;
And, like you, whisper, shrug, and wink,
Say *Ay* and *No*; but never think.

APRIL.

Of these, those give the most Offence,
Who 'gainst themselves give Evidence;
Who prove what all suspected long,
And strive to shew they're in the *wrong*,
Whose Streams, tho' shallow, Depth would know,
And Force—but that so wide they flow;

MAY.

Despising Order, Reason, Rule,
Incessantly they play the Fool,
A Gleet is fix'd upon their Tongue,
Which runs—tho' always in the *Wrong*;
Hope you such Bablers e'er shou'd cease,
Hope in *Cheapside* at Noon for Peace!

JUNE.

Hope Lawyers will forget to cheat,
Hope Priests sincere—nay hope to meet,
Virtue at Night parade the Street.
Words void of Sense, Fools without End
Pour forth—and spoil what they commend,
Ev'n damn what they don't comprehend.

JULY.

Grant me, ye Powers, if such your Will
That if I I'm doom'd to suffer still
By Fools—with silent Fools to keep ;
The *Head-ack*'s worse by much than Sleep ;
The Dull, Conceited, and the Vain
Will always merit our Disdain.

AUGUST.

You interpose and smile again,
Maliciously—then cry Amen.
But spare a little, Sir, your Friend
In half an Hour my Verse shall end.
Have Patience—something more I'll do,
To force a Compliment or two.

SEPTEMBER.

Some are held Wise tho' mighty dull,
Others call'd Wits of Babbling full ;
But Wit, if Wisdom is not nigh,
Beats, like a fev'rish Pulse, too high,
And Sense, where Wit does not improve,
Is too lethargic, Sir, to move.

OCTOBER.

What gone—I swear you're downright rude—
What's left to say's extremely good :
Thrice envy'd you the *Mean* can hit,
With Judgment can restrain your Wit :
At once be wond'rous wise and gay,
Say what you think—think what you say.

NOVEMBER.

Such Sense seems from your Thoughts to fall,
And Wit—you need not think at all ;
Be popular, speak once an Hour,
Your *Leaves* with your Words devour :
But when the *Sponge* you fill is dry,
They will the first your Faults descry.

DECEMBER.

'Tis Pity, Friend, that such as you
Shou'd doat on Pantomime and Show !
Shou'd hope, from any vain Pretence,
To be possess'd of *Common Sense*.
Bridle your Tongue—despise the Croud,
And Fame shall chant your Worth aloud.

The BRITISH SIBYLS,

O R

FEMALE FORTUNE TELLERS.

NO more the *Delphic* Altars smoke,
Or *Pythian* Dames the God invoke,
A Race of *Sibyls*, more refin'd,
Here captivate the Female Mind ;
Who instant Joy or Grief dispense,
And ev'ry *Passion* influence :
A Smile can from *Prudera* force,
And cause *Flirtilla* deep Remorse.
To these they num'rous Altars rear,
At which they Morn and Noon appear ;

To ask what their Success will prove;
At Play, in *Bu'sness*, and in Love.

See *Fumes* from yonder Vases rise,
To purify the *Votaries*:

The mystic Water handed round,
Question on Question they propound:

Flamella reddens, *Flavia* sighs!

Nigretta seems to wipe her Eyes!

Stella an equal Visage wears,

Unmov'd at all she sees and hears;

Titteria laughs to shew her Wit,

While *Flora* falls into a Fit:

And all, in less than half an Hour,

Feel the Effects of Pagan Pow'r.

The Atoms now precipitate,

To shew the dark Decrees of Fate;

Paint in the Bottom of a Dish

A Man, a Monkey, *Foxol*, or *Fish*,

Or any Thing which Fancy coins,

To aid, and to pervert Designs.

Let's view the Pictures here express'd,

Which Transports raise in ev'ry Breast.

Ye Christian Priests! forbear to rail,

Hence learn that Custom will prevail.

Here Vegetables, void of Sense,

Foretell the Will of Providence.

Sibylla takes the offer'd Cap—

Pauses—at length with Eyes lift up,

She sighing says, "What's this I see?"

"Oh Heav'n's! a Horse! whose can it be?"

Flavia replies, "My Mother's ill,

"Because she thinks I'll marry *Will*."

Another comes—she pries into't,

All fix their Eyes upon her Mute.

"Hah! here's a Ring, the Bridegroom by!"

"Whose Cup is this?" 'tis *Stell's* they cry:

"Then she'll be married soon I'm sure,"

They wish her Joy—she looks demure.

The Third a various Scene imparts,

Here's Gold, and Diamonds, Lovers Hearts:

"Take Time by th' Forelock *Miss*! before ye,

"Stands *Fortune* deck'd in all her Glory."

But see the Tables turn again,

Farewel to Pleasure—enter Pain!

From tender Matrons Sorrows flow!

Here come the Messengers of Woe.

"A fatal Train!—The Owl I see!

"And *Raven* croaking on a Tree!

"A Letter too just seal'd with Black,

"And mourning Cloaks stuff'd in a Sack!

"Don't cry, my *Dear*, 'tis but a Brother;

"Come—instantly toss off another.

"The next, perhaps, may ease y-ur Pain,

"'Tis often Sun-shine after Rain."

The GENTLEMAN and LADY'S

Flora, the Sage's Voice obeys,
And checks her Grief a hundred Ways ;
Then sips as if no Care was known,
And, trembling, turns the Vessel down.
When drain'd, *Sibylla* looks it o'er,
And finds great Blessings left in store :
*A stately House—a Husband fair—
A Pad—a Chariot, and a Pair—
Money—and all that Heart can wish,*
Jumbled together in a Dish.

My Patience tir'd I turn away,
But more Enquiries bid me stay.
The wanton *Widow* rolls her Eye,
And burns to hear her Destiny ;
Places her *Cup* just in the Centre,
In Hopes to find a second Venture :
In it, two *Turtles* strait appear,
And promise Consummation near.
She's gone—when, lo ! *Panthea* comes,
Looks cloudy, stretches, yawns, and hums ;
Convinc'd, by melancholy Proof,
Would freely shake the *Fetters* off ;
But ah ! no *Ring*, nor *Turtle's* found,
The *Myrtle* shews my *Lord* is found.

MORAL.

'Tis strange what Heav'n forbids to know,
Should elevate, and sink them so ;
And what was for a Bliss design'd,
Should prove the Curse of Woman-kind.

The WISH. By *Modestus*.

WOULD Gods again—as Poets feign, come down,
And when I wish, my humble Wishes crown,
What should I ask ?—to rise to Grandeur ?—no ;
From thence unnumber'd Evils daily flow.
Pride and Ambition, Insolence and Hate,
Are the Companions of the anxious Great ;
Nor wou'd I Beauty ask ; for that were vain,
Which by decreasing wou'd increase my Pain.

As the Four Quarters of the Year run round,
Ye Pow'rs, assign to each but Thirty Pound ;
A little House full Thirty Miles from Town,
Just big enough to hold true Friends alone.
Let Satisfaction be my greatest Feast,
And hearty Welcome wait upon my Guest.
Two Servants only shou'd my House attend,
One for myself, another for a Friend ;
In a calm Life, thus happy in Retreat,
My sleeping Envy ne'er shou'd haunt the Great ;
My Mind no more with anxious Cares be press'd,
Nor a *Young Prince* be more supremely blest !

B E D L A M.

IN this *false Age*, you'll think it hard, no Doubt,
To find where TRUTH her Oracles gives out ;
Where, strip'd of all Disguise, the *Villain's* shown,
And all the *Secrets* of his Heart made known.
Then follow me, *fair Nymph*, to yonder Plain,
And to the Knowledge of Mankind attain ;
There you shall hear the Foibles of the Great,
The Frauds in Under Officers of State,
There you the faithless *Guardian* shall discover,
The injur'd *Orphan*, and the perjur'd Lover ;
The *tricking Lawyer*, avaricious Slave,
The cruel Parent, and *designing Knave*.

The TEMPLE's here !---Truth's Votaries survey---
Mark in what various Forms they Worship pay.
Hear that young *Damsel* tell her mournful Tale,
And this ambitious *Fool* his Lot bewail.
Sunk in Despair, see there th' *Enthusiast* stands
Half drown'd in Tears, and wringing both his Hands.
Turn thence, and take a View of that *false Brother*,
Who brings and carries Tales from one another ;
Big with *unbosom'd Spleen*, Himself exposing,
To ev'ry Neighbour's Business thrust his Nose in ;
While *Pettifogger*, at his Elbow, stays,
Attentive catching ev'ry Word he says :
Hence Discord, Strife, and Suits vexatious flow,
With all the meagre Train of human Woe.

From such *Incend'aries* with Speed retire,
Whom none but Fools, and Sycophants admire.
See *Mutes*, in Pairs, to yonder *Altar* come,
By Wrongs receiv'd, or with Remorse struck dumb ;
See them with folded Arms, and down-cast Eyes,
In solemn Silence pay their Sacrifice.
But above all---observe with lifted Paws,
The *Country Squire* court popular Applause ;
Boast of his private Interest with the Great,
His Godfather a *Minister* of State ;
Behold the Vanity he keeps in Store!
His Farce of Grandeur, and his Nothing more.
Now challenge all, 'twixt *Medway* and the *Tweed*,
To tell where you have been from what they read.

Honestus Idem.

The MODEST YOUTH. By *Waltoniensis*.

1. WHEN I find my sweet *Molly* alone,
O how my poor Heart beats for Joy !
I trembling by Her sit down,
And thus the blest Minutes employ.
2. I gently touch her soft Hand,
And beg she'll permit me a Kiss ;
Then let the dear *Nymph* understand,
I long for the conjugal Bliss.

The GENTLEMAN and LADY'S

3. I breath kind Expressions of Love,
And tenderly whisper my Mind;
But still unsuccessful I prove,
Alas! I'm too modest I find:
4. To the City or Camp I'll repair,
And learn to be bolder and gay,
And then I shall court with an Air,
And soon carry Molly away.

Johnny's Opportunity. By Mr. Landon.

1. IN May, when Flow'rs delightful spring,
And Hawthorn Trees begin to blow,
And pretty Birds do chirp and sing,
And Girls to gather Cowslips go;
Let the Lover then address,
And be's sure to have Success.
2. When Fifteen Years the Nymph has seen,
And pleasing Thoughts her Bosom warm,
When gayly drest, in white or green,
She strives some sprightly Swain to charm;
Let the Lover then address,
And be's sure to have Success.
3. When all alone Clarissa's found,
A Reading some Romance, or Play,
Or walks the Meads, or Gardens round,
To pass a leisure Hour away;
Let the Lover then address,
And be's sure to have Success.
4. When to some pleasant Summer Fair,
To buy or Knots, or Gloves, or Lace,
The booming Virgins all repair,
And Joy appears in ev'ry Face;
Let the Lover then address,
And be's sure to have Success.
5. When Music's soft persuasive Strains,
The melting Maiden's Ear delight,
When warming Draughts have fill'd her Veins,
And Mirth and Dancing crown the Night;
Let the Lover then address,
And be's sure to have Success.

Epigrammatic ODE. By Milo.

Friendship and Duty,
Love and Beauty,
Give us Joy by Turns!
With this to Day our Hearts we try,
For that To-morrow with and sigh!
And new Desire still burns!

To Lucinda, eclips'd by a MASK.

INGRATEFUL, and retractive Maid,
A Veil of Darknes thou hast thrown
Over that Beauty, which display'd
Thy MAKER's Glory, not thy own.

What *spleenful* Avarice is this,
 To hoard that *Treasure*, which before,
 Fill'd all the World with Light and Bliss!
 Yet wastest not the boundless Store?
 Dear Niggard, imitate the Sun,
 (*The Sun thy fit Similitude*)
 He shines not for Himself alone,
 But for the public Joy and Good.
 Remove the Cloud, that from thine Eyes
 Mankind may Light and Comfort take;
 Or, if our Service you despise!
 Yet do it for your own *Name's* Sake.
 Thy Face will lose it *Sovereign* Praise,
 By this *obscure* Retreat of thine:
 Behold! since Thou hast hid thy Rays,
 How proudly *meaner* Beauties shine!
 Arise my *Love*! and make them know
 They own their *Lustre* to thy Night;
 The *Stars* grow dull, and make no Show,
 When once the SUN appears in Sight.
 Since that which makes the Day so clear,
 The *Sun-shine* of thy Eyes is fled;
 Let *Love's* Night wish'd-for Hour, my *Dear*!
 Softly conduct us both to *Bed*.

ANAGRAM. By Mr. Richard Gibbons.

LONG before *Adam*, one there *lived*
 And liveth still (as 'tis believ'd)
 Whose Name revers'd, as here you'll see,
Ladies, pray tell me who this be?

The SCOLD. An Epigram.

I'M a scolding *old Woman* of Four-score and Eight,
 Of a crooked Condition, and never was straight;
 I scold twice a Day 'till I'm quite out of Breath,
 'Tis the Joy of my Life, and Defence against Death;
 Scolding opens my Pipes, and it quickens my Blood,
 And serves my Occasion for Physic and Food;
 My *Grandmother* told me, and charg'd me to try,
 That so long as I scolded, I never shou'd die.

SENTIMENTS on Worldly Grandeur.

"RIOT and *Wine*, but for a Moment please;
 "Delights the *GREAT* enjoy, but never Ease.
 "Nature deprav'd, Abundance does pursue,
 "Her first and pure Demands are cheap and few;
 "What Health promotes and gives unenvy'd Peace,
 "Is all expanseless, and procur'd with Ease.
 "Condition, *Circumstance* is not the thing,
 "Bliss is the same in Subject or in King;
 "In who obtains Defence, or who defend,
 "In him who is, or him who finds a Friend.
 "Reason's whole Pleasure's, all the Joys of Sense!
 "Lie in three Words, *Health*, *Peace*, and *Competence*."

The EPITAPH of Sir *Isaac Newton*, as it appears on
Monument in *Westminster Abbey*. Sent us by
Randles of Wem, Shropshire.

Here is deposited
Sir ISAAC NEWTON Knight,
Who, by the Light of Mathematic Learning, and
a Force of Mind almost divine,
First explain'd
the Motions and Figures of the Planets and Planetary Orbits,
Paths of the Comets, and Tides of the Ocean.
Discover'd, what no one before ever suspected,
The Difference of the Rays of Light,
and the Distinction of Colours thence arising.
He was a diligent, penetrating, faithful Interpreter
of Nature, of Antiquity, and Holy Scripture.
By his Philosophy he asserted the Majesty of God,
the greatest and most glorious of all Beings;
and by his Morals express'd the Simplicity of the Gospel.
Let Mortals congratulate themselves
that there has been such a Great and Good Man,
The Glory of the Human Race,
Born Dec. 25th 1642, and died in March 1726.

An Express from the MOON.

HAVING received a second Express from *Dagal Hal Lagal*, Emperor of the Moon, with several further Particulars relating to Government, Laws, and Customs of the Inhabitants of the Planet Jupiter, we here insert them for the Entertainment of the Curious.

The *Empress*, he says, is restrained under certain Regulations for Conduct in private Life, as well as being under an implicit Subjection to the Laws of the Kingdom, in Public. That *Vice* has no Opportunity of Access in the Palace; nor has Royalty the Power to oppress the Subject. Justice and Moderation direct her Actions; the People love and adore her, as they do likewise *Cinluda Esbul*, styled *Charmandra*, Prime Ministress, and would sacrifice whatever is dear to them both their Safeties and Happiness. The Liberty of the People is kept alive by their Simplicity of Manners. Their Desires are moderate, and limited only to the Preservation and Improvement of their respective Properties. They are all sensible that Government was first instituted and submitted to, for the Sake of the Governed; and that the Interest of the *Empress* is interwoven with that of the Subject; while she maintains the Redress of Grievances, and the Care of their Morals, the chief Part of her Sovereign Power. They know also, that Government cannot be supported without great Expences; and therefore cheerfully pay the Supply to what the public Occasion requires; nor does any one dare to object his own private Difficulties in Bar of his Share to be levied. By which Means they are enabled to deliver down to Posterity, that beautiful Frame of Government which will secure Happiness and Glory to themselves, and render them the Admiration and Envy of their Neighbours.

Our Correspondent comes next to inform us of their *Laws and Customs*. First, he says, If the Husband proves jealous of his Wife, or the Wife of her Husband, and can give no sufficient Reason for it, or for his or her suspected Incontinency, the Accuser, on either Side, is, in this Case, banished to the Planet *Saturn* for Life, and he or she permitted to marry again, and hold in Possession the whole Estate, or Effects.

Secondly, If the Husband can prove that the Wife is idle or indolent, and neglects her Family Affairs, she is sent to the *Labour*, a Place of Confinement to Labour, for carrying on the Manufacture of the Kingdom, and there forced to perform so much Work, for a certain Time, or starve; but becoming industrious, and shewing Signs of Repentance, she is returned to her Husband for farther Trial of her Duty. And the same Method is taken with the Husband, if his Wife can prove him to be a *Spendthrift, Idler, or Waster* of his Family's Substance. If the Wife gets drunk three Times, she is sent into Banishment, to the Planet *Venus*, for a Prostitute.

✍ We shall communicate our next Dispatches from *Dagal Hal Lagal*, when we receive them.

Proposals for building LAZY HOSPITALS all over the Kingdom. By the Inspector General.

INTRODUCTION.

AS it is evident there is not any Class of People among the human Species so useless and burthensome to the Community as the *Lazy, the Indolent, and Idle*, we therefore, on mature Deliberation, offer the following Scheme to the Consideration of the Public, for erecting *Mansion-Houses* all over the Kingdom, for the Reception and Residence of those who are the most burthensome to themselves and to others; whereby they will be excluded Society with the *Diligent and Industrious*, and prevented from communicating the *Malady*; at the same Time they will be indulged in a State of Laziness and Supinety, agreeable to their own Inclinations.

We were led into this Thought by taking a Survey of the *Animal Creation*; but particularly of that pretty Republic of the *Bees*, who

Ignavum, fucos, pecus a praesepibus arcent.

VIRG.

CONDITIONS.

I. That convenient Pieces of Ground be purchased all over the Kingdom, as the Sums of 10,000 *l.* be respectively subscribed, at proper Places and Distances, from and about *London*, wherever the *Lazy* are dispersed, and become a Clog to the Public. Each Spot of Ground for building should be chosen in a retir'd Situation, a good Way from any Road or Village, near a Wood or Grove, inviron'd with Hills; and to have a small rapid Stream running along Side of it: To contain about twenty Acres, and be some such Spot as may be found betwixt *Morton* Mount, and the *Grotto*, near *Upper Castle*, in *Kent*.

II. That on every such Spot, between the *River* and the Grove or Wood, a *Quadrangular Building* is to be erected, round a pleasant Garden, like *Grosvenor Square*; the Borders of which to be planted with *Willows and Poppies*, and the Statue of *MORPHEUS*, the God of Sleep and Stupidity, to be placed on a *Pedestal* in the Middle thereof, so as

to be viewed by all such *Drones* therein, that can bear to have their Window-Shutters open'd, their Curtains undrawn, and be at the Pain of opening their *Eye-lids*, before Mid-day, to see the Light.

III. Each Building to be only *Two Stories* high. The upper Ward to be for the Accommodation of the Gentlemen, and the lower Apartments for the Ladies. The Sides and Ceilings thereof to be all wainscotted throughout with *mill'd Lead*. The Floors to be cover'd with *double Dutch* Matting, over which *Carpets* are to be spread for preventing all Manner of Noise.

IV. That the Gentlemen may not be put to the Fatigue of going up one Pair of Stairs, they are to be drawn up in a *Chair*, provided for that Purpose, in like Manner as the *Ladies* are drawn up when they go on Board of Ship.

V. Each Edifice to be built large enough to contain *Five Hundred* Gentlemen, and the same Number of *Ladies*; being together a Thousand *Lazy Souls*; that is to say, Two Hundred and fifty in each *Angle* thereof.

VI. Each of the eight Floors to be subdivided into One Hundred and twenty-five *Cells*, or *Lo'ging-Rooms*, and each of which *Cells*, or Apartments, to have a small Sash at the Bed's Feet, in order that the *Dozers* may behold their *God*, as they lie in Bed; and worship him without Trouble when they are up.

The Furniture of each Cell to consist of a *Down Bed*, Bolster, Pillows, Blankets, Quilt, Curtains, &c. one easy Chair, a Tea-table and Equipage; a Stand for the Chamber-Pot, a Smelling Bottle, Stove and Bed-Pan; Red *Morocco* Slippers, lin'd with Flannel for the Gentlemen, with various Sorts of Night-Caps. Silk and Velvet Ditto for the Ladies. *Muffs* for *Military Officers* in the Winter, and Fans for the Summer.

VII. Every one of these Apartments to have a Prospect to the Garden through the Sash, so that without moving the Body, or scarcely the Eyes, they may behold the Garden and their Idol *Morpheus*, On which Account all the vacant Spaces for Visitors, or Attendants, to come along, or for Strangers to walk in, must be towards the Out-side of each Building, and not the Middle thereof, as usual.

VIII. All the Offices to be underneath the *Lady's Wards*, who must have each a separate *Bell*, contriv'd so artfully as to ring with the least Touch, or Motion of the Hand; by a *Spring* fix'd at the several Beds-heads.

And these *Bells* to be all mark'd in the Offices below; the Ladies with their Marks on the Inside, and the Gentlemen their's without.

IX. As here will be no Occasion for a *Chapel* to be built, or for a *Chaplain*, this Saving to be applied towards furnishing Chairs and Litters, for carrying those to take the Air, who chuse it, and are likely to mend of their *Letbargy*, round the Garden, for which Purpose Servants and Coairmen to be provided; as well as other Servants to attend the *Lazinesses* within Doors. The Gentlemen and Ladies to be carried to the Water's Side to do their Business, when they like it.

X. The Gentlemen and Ladies to be taken up and put to Bed without suffering the Fatigue of dressing or undressing themselves. Breakfasts to be provided at Noon each Day, Dinners at Five in the Afternoon, and Suppers at Eleven at Night; tho' Breakfasting, Dining and Supping in Bed extraordinary, at other Times to be allow'd, as suits every *Drone's* Taste, or Inclination. The Food to be brew'd for such as don't chuse to take that Trouble, or to feed themselves; others

ed by a *Waiter*, and have their Teeth pick'd. The Gentlemen and Lady's Hands and Faces to be wash'd for them; not suffer'd to touch a drop of cold Water, for fear of catching Harm. *Doctors* and Nurses are provided for the *Over-eaters*, or those who spend two Hours at Breakfast, Dinner, or Supper; besides eating twice or thrice each Day in Bed.

II. As both *Sexes* are suppos'd to be too Lazy to propagate their *Species*, the *Ladies* and *Gentlemen* are to be under no Restraint in visiting each others Apartments at any Time, and in what Manner they choose. *Cards*, *Snuff*, and *Drams* to be allow'd as freely as they like.

XII. A List of the *Subscribers* Names, with the Sums respectively subscribed, to answer the good Ends propos'd, to be put up in Gold Letters in each Lazy Hospital round the Kingdom,

XIII. That every Gentleman, or Lady, who subscribes 100 *l.* to any particular Lazy Hospital, shall have the Nomination of a *Drone*, once a Year, to be provided for by turn, as Vacancies by Deaths, or Removals happen.

XIV. That the respective Governors shall be chosen out of those who subscribe 1000 *l.* or upwards, towards the Support of each Hospital.

XV. That after living three Years in this extreme State of *Laziness*, if any should dislike to continue living longer in that Manner, and actually shew Signs of becoming useful Members of Society, they shall be permitted to enter the World again amongst the valuable Part of Mankind; where, if they are found to return to their old Course of Idleness and Sloth, upon certain Proof thereof, such to be immediately banish'd the Kingdom for Life.

SUBSCRIPTIONS are taken in, and Security given for the Money received, at the INSPECTOR GENERAL'S OFFICE, in Kent.

The Doctrine and Application of MORALITY.

Of True HAPPINESS; and how to obtain it.

WORLDLY Happiness, or what is otherwise call'd *Contentment*, might easily be attain'd, if we could bridle and restrain our sensual Appetites. The Things necessary to procure this great Blessing are few in Number, lie in a little Compass, and are all comprehended in that short Edition of *Agur*; Give me neither Poverty nor Riches, feed me with food convenient for me. Prov. xxx. 8.— But alas! such is the Depravity of human Nature, that there are few, very few, in whom some predominant Passion does not interpose her Ability to delude, and gratify her Tyranny over the noblest Part of Man, his Reason and Liberty of Reason; seducing the Powers of his Soul to an implicit Reverence of her ministerial Persuasion. Besides the plausible Pretensions, and engaging Address of this Seducer to obtain our Favour and Esteem, she has the ascendancy over our very Nature to conquer our Affections.

Nor is the Bait contemptible: Many People of Parts and Prudence, and of Religion beside, have been stagger'd, and their Virtue put to Proof by her Allurements: The Ruling Passion attending us in this life, throwing us daily into some Confusion and Disorder. So that the epidemical Disease of Avarice, the immoderate Love of Pleasure, the insatiable Thirst of Ambition or Power, bring us into continual Slavery, and plunge us into the Gulph of Misery; wherein all our Thoughts and Affections are swallow'd up. Did Happiness consist in the Possession of Wealth, something might be urg'd in Favour of the Miser;

but it is evident to common Sense, that betwixt the Hopes of getting, and the Fears of losing, his Mind is kept in a State of continual Anxiety.

There is no Passion so mean and sordid as *Avarice*; and it does not appear how 'tis possible for those who idolize Riches, can be infected with that Distemper without being liable to all the Symptoms with which it is attended; such as *Pride, Insolence, and Oppression, Unruliness and Luxury*, and all other the inexorable Tyrants of the Soul! As soon therefore as any one gives himself over to such insatiable Desires, he gives over all Thoughts of Virtue, and looks upon that only to be just and honest which is most useful and advantageous to himself. When Mens Minds and Manners are thus corrupted, making it their Business to defraud this Man of his Inheritance, to lay Snare for another, to wheedle a Third to make them his Heir, to force unreasonable Gain out of every Thing, and to expose even themselves to Sale, they intirely discard that intimate Pleasure that waits upon Innocence, in exchange for those Bottom Quarrels and Anxieties that reverberate and sting them to the Heart.

Neither must we look for Happiness in Courts and Palaces. We are much mistaken in the Value of a Crown. We admire it's Brightness, but forget it's *Brittleness*, and gaze upon it's Glory, and consider not it's Frailty. But if all the gay Things were our own which we fondly imagine were really to be met with in Greatness, yet we shall find on Reflection, that they are always purchas'd too dear. For 'tis a standing *Maxim* in Policy, *That those who covet Dominion over others first become Tyrants in the Lust of Power*. Ambition knows no Bounds; there is nothing so sacred but it will violate; it claims kindred with every Vice, and stoops to take up every Sin that lies in it's Way; as it is such a complicated Mischief we should avoid it in ourselves, and not be dazzled with it in others.

Nor is the sensual Person happier than the Great, in his Search of Variety, and the Disappointments he meets with.—For obtaining this inestimable *Jewel* of Happiness, in the first Place it will be necessary for us to have a thorough Knowledge of ourselves, and to observe what Passions are most predominant in our Nature. Then we must take Counsel of our Reason, and follow her Dictates with Steadiness and Resolution, to avoid the Dangers into which we are most liable to be precipitated. Nothing is more dishonorable and shameful than to suffer our Reason to be dethron'd by every casual Temptation, whereby that divine Principle which inspects over and governs universal Nature is brought under in Man, and made subject to the Yoke. But tho' Reason should ever sit at the Helm, and govern our Passions, yet it should not attempt to destroy them, while it's proper Business is to oppose and controul them to Regulation: Not to govern them as Subjects but Slaves.

A rational Conduct does not therefore consist in fruitless Austerities and rigorous Practices of Religion: But in the charitable Exercise of Conscience and Reason, Religion and Morality, and to act in Conformity to their just Dictates, if we expect to be happy; which is the true Interest of the whole intelligent Creation. And herein consists that glorious Resemblance to the supreme and perfectly happy Being, dignifying Men and Angels, which if duly pursued and imitated, will promote our Happiness throughout all Ages.

ÆTHICUS.

ERRATA. P. 2. l. 24. read I rest, for I dress; l. 27. Beauties dress, for Beauties rest, in the Prefatory Ode.

The

THE DOCTRINE and APPLICATION of MORALITY.
Moral Precepts and Propositions continued. [See last *Palladium*.]

38. Offences and Injuries received should be treated with *Charity* or *Justice*; but not with *Malice* or *Revenge*.

39. He that is guilty of *Lying* or *Deceit*, is incapable of *Friendship* with all *honest* Men; because he cannot be depended upon.

40. He that advances a willful *Falshood* of another in *Public*, by making a false *Quotation*, or *Translation* (as *Lauder* did of *Milton*) is as great a *Criminal* as a false *Evidence* at the *Bar* of a *Court of Justice*, where *Matter of Property* is concern'd; because he is equally *audacious*, and guilty of ill *Design*!

41. *Criticism* is no *Crime*, except attended with *evil* *Intention*, and *willful* *Misrepresentation*.

42. He that accuses another of *Evil*, and *evil* *Designs*, and cannot prove his *Assertions*, deserves the *Punishment* due to that *Evil*, he would make another guilty of.

43. *Avarice* of *Fame* is attended with numerous *Evils*.

44. The surest *Way* to *Fame* of any *Kind*, is by *Indifference* about it, while the *Pursuit* is some *public* *Good*.

MORAL OBSERVATIONS continued. [See last *Palladium*.]

24. ALL *Controversial* *Argument* convinces so much the more, the more it is *moral*, and free from ill *Manners*.

25. *Abuse* in *Argument*, to prove *Truth*, is just like *Swearing* in *Conversation*, to prove *Courage*.

26. *Moral* *Ridicule* or *Raillery*, in *public* *Argument*, serve to rouse the *Attention* of the *Respondent*, and *Hearers*, also lash *public* *Infamy*, with the *satyrical* *Justice* due to it; but, in *personal* *Disputes* about *Knowledge*, and the *Fame* of it, *Ridicule* and *Raillery*, confin'd to *Decency*, serve to assert *Understanding*, and silence and abash the *Obstinate* in *Error*.

27. The *Passions* (more strong in some than others) are apt to inflame on any real or fancy'd *Injury* received, which the *Force* of *Reason* can hardly restrain; yet the *Will*, as *President*, and the *rational* *Powers* being summon'd to *Council*, the *Passions*, thereon becoming obedient, submit to *Order*.

28. While there is *Evil* in the *World*, Men will still be infringing upon each other: The *Evil* first brought in, and still subsisting among *Mankind*, being the *Cause* of all the *Misfortune* and *Misery* attending their *Being*.

29. *Evil* is so habitually planted in some *Natures*, that 'tis not in the *Power* of *Friends* to promote some *Mens* *Happiness*, while (like common *Prostitutes*) they are still seeking *Misfortune*, and bring it down upon their own *Heads*!

30. Abandon'd *Hackney* *Writers* complain of their cruel *Treatment* from *Booksellers*, to whom their ill *Morals* have justly render'd them a *Trey*: Like *Prostitutes* for *Pay*! that will readily oblige and p—x their benefactors at the same *Time*.

31. "The *Serpent* loseth not his *Sting*, though benumb'd with the *Frost*: The *Tooth* of the *Viper* is not broken, though the *Cold* closeth his *Mouth*:"

"Mouth: take Pity on his State, and he will shew thee his Spirit;
 "warm him in thy Bosom, and he will requite thee with Death."

32. Genius may be admir'd in Any, but ill Morals must be hated in All.

33. It is no Charity, to assist a *Prostitute* lost to all Shame, and abandon'd to Misery of His or Her own seeking.

34. He that chooseth a *Beast* able to bear his Burthen shall find Rest; but He that carries a *Vulture* upon his Shoulders shall be pulled to Pieces, and die, as he lives, miserable.

35. Dirt thrown at a clear Character will not stick.

36. The Heart of the Hypocrite is hid in his Bosom, and his Business is to deceive.

37. He works in the Dark like a Mole, and fancies himself safe; but blunders into Day-light, and is betray'd and expos'd, with his Dirt in his Hand.

38. His Days are a perpetual Constraint upon him, and his Tongue and his Heart are for ever at Variance.

The Notions of Spinoza, and Atheism, confuted.

BENEDICT SPINOZA, or *Espinosa*, was born a Jew, at *Amsterdam*, in *Holland*, but made no Profession of any Religion, either Jewish or Christian. He wrote several Books in *Latin*, the most celebrated whereof is his *Tractatus Theologico-Politicus*, wherein he endeavours to overturn the Foundation of all Religion. The Book therefore was accordingly condemn'd by a public Decree of the States; tho' since it has been publicly sold, and even reprinted both in *Latin* and *French* in that Country, and also in *English* at *London*.

Spinoza here insinuates that all Religions are only political Engines, calculated for public Good, to render the People obedient to Magistrates, and to make them practise Virtue and Morality.

He does not lay down his Notions of the DEITY openly; but only suggests his Opinion. In his *Ethics*, publish'd among his posthumous Works, he is more open and express; maintaining that God is not, as we imagine him, an Infinite, Intelligent, Happy, and Perfect Being; but only that natural Virtue and Faculty which is diffus'd throughout all Creatures.

And the great Principle of this Doctrine of *Spinozism* is, that there is nothing properly and absolutely existing but Matter, and it's Modifications; among which are even comprehended Thoughts, abstract and general Ideas, Comparisons, Relations, Combinations of Relations, &c.

Spinozism is a Species of *Naturalism*, *Pantheism*, or *Hylobism*, as it is sometimes call'd, i. e. of the *Dogma*, which allows of no God but Nature, or the Universe, and therefore makes it, and Matter to be God; Notions, long before *Spinoza*, held by many different Sects of Philosophers among the *Chaldeans* and *Greeks*: very much like the Opinion of the *Stoics*, and those who held the Notion of an *Anima Mundi*.

Lucan introduces *Cato* discoursing thus:

*Esne Dri sedes nisi Terra, et Pontus, et Aer,
 Et Caelum, et Virtus? Superos quid quaerimus ultra!
 Jupiter est quodcunque vides, quocunque moveris.*

Lucan. Phars. l. ix. v. 578.

Crato, and some of the *Peripateticks*, were of Opinion something like it. And tho' no ancient Sect seems farther remov'd from *Spinozism* than the *Platonie*, they attributing the greatest Freedom to God, and carefully distinguish'd him from *Matter*, yet *Gundlingius* proves at large, that *Plato* gave *Matter* much the same Origin with *Spinoza*. But the Sect that approach'd nearest to *Spinozism*, was that which taught that all Things were ONE, as *Xenophanes* the *Colophonian*, *Parmendes* *Melissus*, and especially *Zeno Eleates*; whence it obtain'd the Name of the *Eleatic System of Atbeism*. To which the Opinion of those may be reduced, who held the first Matter for God, as *Almaricus* and *David of Dinantum*. Also, the Sect of *Foe*, in *China* and *Japan*; the *Sass* in *Persia*, and *Zindikites* in *Turkey*, philosophize much after the manner of *Spinoza*.

1. That there is but one Substance in Nature; 2. That this only Substance is endow'd with an infinite Number of Attributes, among which are Extension and Cogitation. 3. That all the Bodies in the Universe are Modifications of this Substance consider'd as it is extended; and that all the Souls of Men are Modifications of the same Substance consider'd as cogitative. 4. That God is a necessary and infinitely perfect Being, and is the Cause of all Things that exist; but is not a Being different from them. 5. That there is but one Being and one Nature, and thus this Nature produces within itself, by an immanent Act, all those which we call Creatures. 6. And that this BEING is at the same Time both Agent and Patient, efficient Cause, and Subject; but that HE produces nothing but Modifications of Himself.

Thus the DEITY is made sole Agent, as well as Patient in all Evil, both physical and moral, that call'd *malum pœnæ*, as well as *malum culpæ*. A Doctrine, fraught with more Impieties than all the Heathen Poets have publish'd concerning their *Jupiter*, *Venus*, *Bacchus*, &c. What seems to have led *Spinoza* to frame this System was the Difficulty of conceiving either that Matter is eternal, and different from God, or that it could be produced from Nothing, or that an infinite and free Being could have made a World such as this is.

Matter that exists necessarily, and which is nevertheless void of Activity, and subject to the Power of another Principle, is an Object that startles our Understanding! as there seems no Agreement between these three Conditions.

A Matter created out of Nothing is no less inconceivable, whatever Reports we make to form an Idea of an Act of the Will that can change what before was Nothing into real Substance; contrary to the known Maxim of Philosophers, *ex nihilo nihil fit*. In short, that an infinite, good, holy, free Being, who could have made his Creatures good and happy, should rather choose to have them wicked, and eternally miserable, is no less incomprehensible; and amazingly so, as it is so difficult to reconcile the Freedom of Man with the Equality of a Being made out of Nothing.

These appear to be the Difficulties which led *Spinoza* to search for a New System, wherein God should not be distinct from Matter, and wherein he should act necessarily, and to the Extent of all his Power, not out of Himself (*ad extra*) but within Himself. But if this New System rescue us from some Difficulties it involves in others infinitely greater. *Spinoza* is very full on the Subject of the Authors of the

Scriptures, and endeavours to shew, that the *Pentateuch* is not the Work of *Moses*; contrary to the common Opinion both of the *Jews* and *Christians*. And has also his particular Sentiments as to the Authors of the other Books; which Part of the Work has been answer'd by *M. Huet* in his *Demonstratio Evangelica*; and by *M. Simon*, in his *Hist. Crit. du Vieux Test*.

Numbers have undertaken to refute *Spinoza's* Doctrine; but all very weakly, except what we have in *Dr. Clark's* Sermons at *Boyle's* Lectures.

To which we shall add the Opinion of some modern Sceptics, who acknowledge *God* in their Actions, yet urge that ALL IS *God*, and that all Causes and all Effects ever existed in one Power, as we see exerted in *Nature*. That unless a Cause could be found to *God* as *Creator*, the Wisdom and Power of *God* cannot be otherwise understood, than the Wisdom and Power of one *Nature*; self-existing and self-created. And demand, by what necessary, immanent, and wise Causes did ONE *God* exist prior to one universal *Nature*, to be the Cause of it, and that very *Nature* the Effect of his creating Power? And likewise how one necessary original self-existing and creating Wisdom and Power is better understood than one necessary original self-existing and wise *Nature*? Alleging, that if all *Nature* is not by Necessity, or Chance, that the Cause of it, *God*, must come by Necessity or Chance: Diabolically making the *CREATOR* to be his *CREATION*, i. e. all *Nature*, and all Causes and Effects therein produced.

A N S W E R.

The FOOLS have said in their Heart, there is no *God*.

BUT, if self-existing *Nature* is as incomprehensible as *God* (as Sceptics allow) and we find Wisdom and Power dispensed through the World; it is more rational to give Praise and Adoration to one incomprehensible Wise and Glorious *CREATOR*, as the Cause of created *Nature*, than to bestow it where it is lost (on *Nature* itself) and which cannot reward us for our Duty and Gratitude.

Consciousness is the infallible Principle of all we know, and by which we come to know any Thing. Various are the Effects we consciously perceive are produc'd in *Nature*, by various efficient Causes. And every particular Effect we consciously perceive is adequate to it's efficient Cause, from whence every Effect is singly and immediately produc'd. Whence it will follow, that the immense, infinite, and wise Extension of Things that we see produc'd, and operating in *Nature*, together, and in Succession, must proceed by an infinite Series of Causes and Effects from a NECESSARY, ORIGINAL, ALL-WISE, ALL-POWERFUL, UNIVERSAL and INFINITE CAUSE, continually supporting and acting upon *Nature*, prior to all natural Causes, which is *God* From ALL ETERNITY, and FOR EVERMORE!

As we are conscious of what is doing well or ill, and of Praise or Blame due to ourselves or others, which Consciousness proves the Diversity of our Being and Existence, and that all is not one *Nature*, it is amazing that Men are so wilfully obstinate and blinded in their Understandings, as to acknowledge Beings of superior Power and Wisdom on Earth, whom they adore, and yet refuse to acknowledge and adore a Being superior to all! THE CAUSE of ALL!

I never heard that the most obstinate *Sceptics*, who refuse to own the free Being of a *God*, ever disputed the free Being of their *Prince*, whose *Law* they willingly submit to, and are bound to obey, or not have the Privilege of his Protection. They talk of every thing happening of *Necessity*, and yet ask *Favours*, which shew their *Doctrine* and their *Consciousness* of Things to be direct Contradiction. They talk of *Crimes* committed by *Necessity*, deserving Punishment by *Necessity*; and yet exclaim bitterly against the Offenders! And I have heard them praise what they approve; tho' happening by *Necessity*. Some I have known, in great Fear of Punishment for an Offence given, ask *Pardon* to prevent it; which proves they are not conscious of it's *Necessity*; but will deny *God*, and his Glory for Obstinacy, 'till they come to fear him.

And there can be Nothing more *absurd*, besides impiously dangerous, and *diabolical*, than to dispute the free Being and Existence of Him that made the *Universe*; and all Things therein, by ranking himself with his Work, or making him inseparable from it. For this *Necessity* of a *Pre-existing Agent*, or *CREATOR*, is infinitely more probable than a *necessary Nature* uncreated. The *Voice* of all Nations, and all Nature, consent to adore Him, as *CREATOR* and Supporter of all his glorious Works; and shall the Opinion and Tenets of a few *paulatory Sceptics* weigh against the general Sense and *Belief* of all Mankind?

Rewards and Punishments here, are sufficient Grounds to expect them in a State hereafter. We live now but in the *Dawn* of Existence: Where the greatest Proof of *Immortality* is our continual new Desires, and our *Hopes* and Expectations of it, which could not be implanted in us for Nothing. The *Heathens*, improv'd in their Reason, doubted and discovered *Immortality*. And Mr. *Addison*, in his 210th *Spectator*, shews the Meanness and Absurdity of expecting *Annihilation*. The same Gentleman also, in *Spectator* 185, shews, that *Atheists* are great Zealots and Bigots, and their Opinions downright Nonsense. That the Creed of this Generation of *Wranglers*, requires an infinitely greater Measure of the *Faith*, than any Set of religious *Articles*, for the good of Mankind, they so violently oppose.

UPNORENSIS.

Two ECIPSES of the SUN, 1752.

I. On Saturday, May the 2d, at Six at Night, invisible. But in some Parts of *North America* the Sun will be seen totally eclips'd.

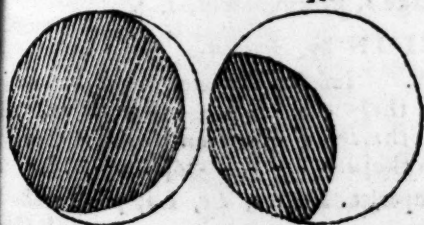
II. On Friday, November the 17th, at Two in the Morning, invisible; but the Sun's Body will be seen totally obscur'd in some Parts of *South America*. It's Appearance and Types are as follow:

For *Jamaica*,
Nov. 17.

For *Boston in New*
England.

I.

II.



Beg. Mid. End. Dur. Dig.

I. 11 44 | 1 20 | 2 48 | 3 4 | 10 45
II. 10 30 | 1 44 | 2 50 | 2 20 | 6 15

Astronomical Occultations and Remarks.

1. AN Occultation of *Saturn* by the Moon, happens *January* Three Hours in the Morning, 1752, but an Hour before Sun Rising; not visible. In *Holland* or *Germany* it will be conspicuous.

2. Another Occultation of the same Planet by the Moon, happens *March* 24, between Eleven and Twelve at Night; *Saturn* rises about Forty-six Minutes after Midnight, so not visible.

3. Another Occultation of *Saturn* happens *April* 21, but after Sun-rise. The Moon makes a very near Appulse to *Jupiter*, *January* 15, about the Time of their Setting.

The Moon and *Mars*, *February* 9, set pretty near to each other.

Venus is a Morning Star till the 6th of *August*, when she becomes an Evening Star to the Year's End.

Jupiter is an Evening Star until the 3d of *June*, and from thence a Morning Star 'till the 31st of *December*, and then becomes an Evening Star.

N. B. *Mercury* and *Venus* are never seen a whole Night together. *Venus* is never carried farther from the Sun than 48° ; *Mercury* never more than 28° ; and so can never be seen in Opposition to the Sun.

Venus may be seen in the Evening after the Sun is set, and the next Morning before the Sun rises.

ERRATA in this Pall. Pag. 26. l. 1. read *c* being put for 3. 14159; blot X. p. 32. l. 6. for lowest read slowest. Indices, &c. p. 28. l. 4. for first read first. p. 34. l. 17. for Denom. r. Numer.

Lad. Diary 1752. p. 40. l. 10. for decreed read divided.

The following Scheme of a FRENCH GRAMMAR is very concise, and yet clear to be understood by Gentlemen and Ladies that have made any Progress in the French Language, so whose Improvement it will greatly contribute in a short Time.

THE

Compendious FRENCH GRAMMAR;

By ALEXANDER DRUMMOND, M. A.

Teacher of the FRENCH Language.

GRAMMAR comprehends Nouns, Pronouns, Verbs and Particles. Nouns (the Names and Qualities of Things) are declined by Articles; which make the two Genders, Masculine *Le, the*; Feminine *La, the*. Numbers Two, Singular One, the Plural Many. Plurals take *s*; but if the Singulars end in *al, ail*, the Plurals take *aux*. The Singulars in *s, x, z*, invariable. *nt, nd*, take *s*, striking off *d, t*.

DECLENSION by Articles.

Singular Numb.	Plural Numb.	Indefin. Article.	
N. <i>le, la, l'</i>	<i>Les, - - - - the</i>	<i>- - - - -</i>	Roy, King.
G. <i>Du, de la, de l'</i>	<i>Des, of or from the</i>	<i>De, d' of or from</i>	Reine. Queen.
D. <i>Au, à la, à l'</i>	<i>Aux, - - - to the</i>	<i>à - - - - - to</i>	Homme, Man.
Compar. Degree, <i>Plus</i> , more.	Superlat. Degree, <i>Le, La, plus</i> , most.		P. R. O.

PRONOUNS (instead of Nouns) are declin'd by the *Indef. Article*.

Singular.

Plural.

Moi, me, me, to me

toi, te, thee, to thee

lui, le, la, him, her, &c.

Nous, nous, us, to us

Vous, vous, you, to, &c.

Les, leur, them to, &c.

Sing. Plur.

mas. fem. plur.

n. ac.

Notre, nos, our

Mon, - - my

Votre, vos, yours

ton, a, es, thy

Leur, leurs, their

Son, his, her

Qui, que, who, that, whom
m. fem.

Quel, le, who
Lequel, laquelle.

VERB is an *Action* with Relation to Times, Numbers, and Persons.

ROOTS of VERBS from whence Tenses derive.

Info.	Blamer, to blame	Finir, to finish	Recevoir, to receive	Rendre, to restore
P. Act.	Blamant, blaming	issant, - - ing	ivant, - - ing	ant, - - ing
P. Pass.	Blamé, blamed	Fini - - - ed	Reçu, - - - ed	Rendu - - - ed.
Nom. with recip. Verbs				

TABLE of the Plurals of VERBS.

je, me	Pres.	Blame,	ons, ez, ent	Blame, do blame, am blaming,
tu, te	Imp.	Blamais,	ions, iez, oient	Blamed, did blame, was blaming
il, le	Cond.	Blamerois,		might, shd, wd, or could blame,
elle, se	Perf.	Blamai,	mes, tes, rent	Blamed, time quite elapsed,
nous, nous	Fut.	Blamerai,	ons, ez, ont	shall, or will blame,
vous, vous	Pres. Subj.	Blame,	ions, iez, ent	may, or can blame,
ils, se	Perf.	Blamasse,		might blame.

It remains to find out the Persons Singular? If the first Person has no *e* or *x* at the End, the Second takes *s*, and the Third as the First; but if the First ends in *s* or *x*, the Second is as the First, and the Third takes *t*, except *je vais, tu vas, il va*; and *ai, as, a*, Pres. of *avoir*: If the First ends in *ai*, the Second changes *i* into *s*, and *s* is suppress'd in the Third. In the Pres. Subj. the final *isse* is chang'd into *t, fisse, fit*.

Verbs in *enir* and *ewoir*, whose Third Persons Plural of the Pres. Subj. are like the Third Person Plural, Pres. Indicative in *ienent* and *oivent*.

Formation of Tenses from the Table and Roots. The Imp. Ind. is formed from the Part. Act. by changing *ant* into *ois*; the Future by adding *ai* to the final *r* of the Infin. the Condit. from the Future by *rai* into *rois*. The Pres. Subj. from the Part. Act. by *ant* into *e*. Except Verbs in *enir* and *ewoir*, that take *ienne* and *oive*, the Perf. Subj. from second Perf. Sing. Pres. Ind. by adding *se*. All Compound Tenses from the Verbs *avoir* or *etre*, with the Part. Pass. as *j'ay Blamé, ja fais Blamé, &c.*

In the following LIST of Irregular Verbs, the Roots and Tenses are set down, that are most Irregular. The Pres. will be marked with 1, the Perf. by 2, Future 3, Pres. Subj. 4. Generally the Perf. Ind. are like the Part. Pass. by adding *s* to the P. P. when they have no *s*.

Aller, to go.	Avoir, to have.	J'ai, ont, 1.	Acquerant.
Allant.	Avois, Imp.	Aurai, 3.	Acquis.
Allé.	Ayant.	J'aye, 4.	Acquiers, 1.
Je vais, vont, 1.	eu.	Acquerrai, 3.	Boire,

Boire, to drink.	Fais, a. t.	Savoir, to know.	Veux, Veulent, 1.
Beuvant.	Fait.	Sachant.	Voudrai, 3.
Bû.	Fais, vous, faites, 1	Sû.	Veuille, 4.
Bois, Beuvent, 1.	Font, 1.	Sais, avons, 1.	Impersonal Verbs.
Boire, 4.	Fis, 2.	Soudre, from	C'est, it is.
Bouillir, to boil.	Ferai, 3.	thence résoudre.	C'étoit, it was.
ant.	Fasse, 4.	Resolvant.	Cesut, it was, &c.
i.	Coudre, to sew.	Resolu.	Il y a, there is.
Je Bous, 1.	Cousant.	Resus, olvons, 1.	Il y avoit { there
Bouille, 4.	Cousu.	Resolve, 4.	was,
Croire, to believe.	Lire, to read.	Suivre, to follow.	Il y eut { &c.
Croyant.	Lisant.	Suivant.	Il faut, it must.
Cru.	Lu.	Suivi.	Il faisoit.
Croye, 4.	Mettre, to put.	Suis, s, t, &c. 1.	Il salut.
Courir, to run.	Mettant.	Vaincre, to subdue.	Il faudra.
Courant.	Mis.	Vaincant.	Je, tu, il, nous, &c.
Couru.	Moudre, to grind.	Vaincu.	are all placed
Cours, 1.	Mouant.	Vainquis, 2.	after Verbs to
Courrai, 4.	Moulu.	Valeir, to be worth	form Interroga-
Dormir, to sleep.	Meule, 4.	Valant.	tions.
Dors, 1.	Mourir, to die.	Valu.	Negatives, ne pas.
Cueillir, to gather.	Mourant.	Vaux, 1.	point, not, &c.
ant.	Mort.	Vaudrai, 3.	ne goes before
i.	Meurs, ourons, 1.	Vaille, 4.	the Verb, and
Cueillerai, 3.	ex, meurent.	Venir, and others	pas. point. after.
Conclure.	Mourus, 2.	in enir.	Adjectives take e
uant.	Mourrai, 3.	l'enant.	to form their
u.	Meure, 4.	Venu.	Feminines. Ex-
Dire, to say.	Noitre, to be born.	Viens, 1.	cept
Disant.	Naissant.	Vins, 2.	M. F.
Dit.	Né.	Viendrai, 3.	Aitre, Aitressa.
Dis, dites, 1.	Naquis, 2.	Vienne, 4.	rais, raicte.
Comp. Disez.	Verbs in	Vivre, to live.	eau, elle.
Ecrire, to write.	Oitre, aitre.	Vivant.	ec, ecbe.
Ecrivant.	issant.	Vecu.	cil, cille.
Ecrit.	u.	Vis, 1.	euf, eue.
Ecrivis, 2.	Pouvoir, to be able	Voir, to see.	eux, euse.
Etre, to be.	Pouvant.	Voyant.	ic, ique.
Etant.	Pu.	Vu.	ien, ienne.
Été.	Peux, euvent, 1.	Vis, 2.	if, ive.
Suis, es, est, 1.	Pourrai, 3.	Verrai, 3.	nin, nigne.
Sommes, etes, sont, 1.	Puisse, 4.	Compounds, oirai.	ong, ongue.
fus, 2.	Prendre, to take.	Vouloir, to be will-	ori, orite.
Serai, 3.	Prenant.	ing.	ou, olle.
Sois, 4.	Pris.	Voulant.	oux, ouct.
Faire, to do.	Prenne, 4.	Voulu.	

S Y N T A X

Is the due Disposition of the Parts of Speech to form regular Sentences. Articles, *Le, La L', Les*; and their Cases are placed before Names of Kingdoms, Provinces, Rivers, Virtues, and Vices: as *La France, La Clemence*, &c. except when these Names of Kingdoms are mentioned, as going to, staying in, or coming from, then we use *de* or *en* without the Article, or *dans* with the Article. *Du, dela, de l', des*, exprès *P*

Things; *du Pain*, some Bread. If the Adjective is before the Substantive we use *de*, instead of the Def. Article, *de modestes ignorans*. After Words of Quantity comes *de trop d'argent*, &c. *bien* signifying much, many takes the Def. Article, *bien du merite*. Adjectives agree with their Substantives in Gender and Number, *La Grande Ville*. Participles are like Adject. with this Difference, they are always placed after Substantives; they are Indeclinable after the Verb *avoir*, unless the Noun precedes the Verb, *elle a donne la pomme que j'ay donnee*. Declinable after the Verb *etre*, except *Etre* is used instead of *Avoir* in the Reciproc. Verbs, in which Case Particip. follow the Rule of the Verb *Avoir*. Comparisons, *plus*, *moins*, are followed by *que*, unless signifying Numbers, then by *de plus de deux jours*, if they are followed by a Verb, *ne* is put, *Je lis mieux que je ne parle*. Pronouns, *me*, *te*, *je*, *nous*, *vous*, *le*, *la*, *les*, *lui*, *leur*, *y*, *en*, are placed before Verbs, except in the first and second Persons in the Imper. Mood, *Je vous donne*, *donnez-nous*. Verbs have always a Nominative, which they agree with, *Nous Blamons*. Verbs of Intreaty or command take *de* after them. Several Verbs with *que* after them put the following in the Subj. Mood, *Il faut que je lise*. Particles unalterable.

Of ECLIPSES. See last *Palladium*, pag. 62.

THE Limits of the Eclipse of the Sun are hitherto consider'd without Allowance for the Moon's *Parallax*, which is about one Degree (and sometimes more) near the Horizon, called the *Horizontal Parallax*; and diminishes, in all Degrees of the Moon's Altitude, from the Horizon to the *Zenith*, where it vanishes. This *Parallax* being the Angle between the true Place of the Body, as if seen from the Earth's Centre, and the apparent Place of it, actually seen from the Earth's Surface, or the Angle, the Semidiameter of the Earth would be seen under from that Body, depresses the true Place of it to the Apparent, in all Altitudes from the *Zenith* to the Horizon, by that *Parallax*; so that the Moon having *North* Latitude with us, it is thereby diminished; or *South* Latitude with us, it is thereby encreas'd; as the apparent Longitude of the Moon thereby also differs from the true: By which the Limits of Solar Eclipses are variable by a small Matter, according to each Degree of Latitude of the Places where those Eclipses are seen.

The Sun being at such an immense Distance from the Earth, the Angle, the Semidiameter of our Earth would be there seen under amounts to no more than 10", and therefore in computing the Appearances of Eclipses, the Sun may be reckoned without *Parallax*, that would affect the Computation; tho' the same Semidiameter seen from the Moon is considerable, and about a Degree when the Moon is at the Point of our sensible Horizon.

The Angle under which the Semidiameter of the Moon's dark Shade appears at the Earth, when seen from the Moon, is equal to the Difference of the apparent Semidiameters of the Sun and Moon, seen from the Earth; and the apparent Semidiameter of the Moon's *Penumbra*, seen from the Moon, is equal to the Sum of the apparent Semidiameters of both Sun and Moon, seen from the Earth; as the Earth's apparent Semidiameter, or that of the Earth's Disk, being equal to the Moon's horizontal *Parallax*, as a little Consideration will shew the Truth of.

The apparent Semidiameters of the Sun and Moon, and also the Horizontal *Parallax*, being calculated in *Astronomical Tables* to the several

Distances of the Sun and Moon from the Earth, with the least, and greatest Eccentricities of the Lunar Orbit, the Quantity of a Eclipse may be represented by

The Projection of the Section of the Moon's Shadow upon the Disk of the Earth, moving thereon from West to East, at the Rate of 30 $\frac{1}{2}$ Minutes of the Lunar Orbit, per Hour, at a mean Distance of the Earth's Semidiameters, which answers to 69 $\frac{1}{2}$ Miles or Degrees of a great Circle of the Earth, for every Minute of the Lunar Orbit, about 2104 English Miles moved in an Hour, in 30 $\frac{1}{2}$ of those Minutes being the Difference of the Velocity between the Moon and Earth. This is the Velocity of the Centre of the Moon's Shadow advancing over the Disk of the Earth, being more than the Velocity whereby that Shade recedes from any given Place on the Earth's Surface; because while the Shadow moves from West to East thereon, all the Places of the Earth are likewise carried by the Earth's Rotation the same Way, with a slower Pace, and diminish the Velocity at that Rate, of the Shade moving Eastward from them.
[To be continued.]

BOOKS to be Publish'd.

1. A New and Exact *Theory* of the Motion of Water issuing from a known ORIFICE, at the Bottom of a spouting Vessel. By Excellentius.
 2. Of Cornuted Curves, with an Appendix on the DOCTRINE of Cyphers. By Mr McLaughier.
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 2. A false Definition applied to a New Method of Fluxions. By F. R.

The Treble Case harden'd FILE, given Gratis.

SEE the deaf Adder bite the File,
His Fury to allay,
But vain th' Attempt, for, all the while,
His pois'nous Fangs decay:
So Ignoramus in the Dark,
His Spight and Venom spits!
So Puppies at the Moon-shine bark,
And shew their Rage by Fits.

N.M. 3h. M. F.Q. 11d. N°. FEBRUAR. F.M. 18d. 7h. M. L.Q. 26d. 3h.

D	⊙ in ♍	Decl. So.	h in ♏	l in ♏	♂ in ♏	♀ in ♏	♂ in ♏	♀ in ♏	D's Pl.	Lat.
1	23° 16' 2"	13° 47' 16"	22° 40'	2° 6'	9° 17'	8° 53'	28° 39'	20° 37'	3	
2	27 16 37	13 27 12	22 45 2	10 9	53 10	2 29	8	2 55	4	
3	25 17 10	13 6 58	22 49 2	14 10	30 11	11 29	43 15	29 29	4	
4	26 17 42	12 46 30	22 54 2	18 11	6 12	20 0	12 28	15 15	5	
5	27 18 12	12 25 50	22 58 2	22 11	43 13	29 1	5 11	X 22	4	
6	28 18 41	12 4 58	23 2 2	26 12	20 14	38 1	53 24	35 4	4	
7	29 19 9	11 43 4	23 6 2	30 12	57 15	47 2	44 8	γ 33	3	
8	X 19 35	11 22 39	23 10 2	34 13	34 16	56 3	38 21	40 3	3	
9	1 19 59	11 1 13	23 14 2	39 14	11 18	6 4	35 5	8 25	1	
10	2 20 20	10 39 38	23 18 2	44 14	48 19	6 5	35 19	18 0	0	
11	3 20 40	10 17 53	23 22 2	49 15	25 20	26 6	36 3	17 0	0	
12	4 20 59	9 55 58	23 26 2	54 16	2 21	26 7	40 17	22 1	1	
13	5 21 16	9 33 54	23 30 3	0 16	39 22	46 8	48 1	34 2	2	
14	6 21 31	9 11 42	23 34 3	6 17	16 23	56 9	58 15	52 3	3	
15	7 21 45	8 49 21	23 37 3	12 17	53 25	6 11	9 0	Ω 11	4	
16	8 21 58	8 26 53	23 40 3	18 18	30 26	16 12	22 14	27 4	4	
17	9 22 9	8 4 18	23 43 3	24 19	7 27	126 13	37 28	35 5	5	
18	10 22 18	7 41 36	23 46 3	30 19	44 28	37 14	53 12	π 31	4	
19	11 22 24	7 18 43	23 49 3	36 20	21 29	47 16	11 26	54 4	4	
20	12 22 27	6 55 48	23 52 3	42 20	58 0	57 17	31 19	20 3	3	
21	13 22 27	6 32 48	23 55 3	49 21	35 2	8 18	52 22	12 2	2	
22	14 22 26	6 9 43	23 58 3	56 22	12 3	19 20	15 4	43 1	1	
23	15 22 24	5 46 30	24 1 4	3 22	49 4	30 21	40 16	58 0	0	
24	16 22 21	5 23 14	24 4 4	11 23	26 5	40 23	6 28	57 0	0	
25	17 22 17	5 59 53	24 7 4	18 24	3 6	51 24	32 10	51 1	1	
26	18 22 10	4 36 28	24 10 4	25 24	40 8	2 25	59 22	37 2	2	
27	19 22 0	4 13 0	24 12 4	33 25	18 9	13 27	28 4	27 3	3	
28	20 21 48	3 49 30	24 14 4	40 25	55 10	24 28	59 16	27 3	3	
29	21 21 34	3 25 56	24 16 4	48 26	32 11	35 0	X 31	28 35	4	

Days.	⊙ ri. sets apt.	⊙ flow and len. day	Da.br. Da.in.	Lat. N. $\frac{1}{2}$ Rife M.	Lat. S. $\frac{1}{2}$ sets M	Lat. N. $\frac{1}{2}$ sets A.	Lat. N. $\frac{1}{2}$ rife M.	Lat. N. $\frac{1}{2}$ rife M.	D.	l riles, and sets
I	7 ^h 11'	14' 48"	5h 13'	10°N.20	00°S 36	00°N 58'	20°N 11	10°N 39	36	5M 12r. 9g
	4 50	9h 40'	2h 4'	3h M 50	2h M 10	12h A 6	4h M 52	6h M 3	56	A 50 S 0
6	7 I	14 33	5 4	I 20 0	35	I I I	4 I O	4 I	79	202
	5 O	IO O	2 24	3 33 I	52	I 2	4 4	56 5	9 I I	52 4
II	6 5 I	14 O	4 55	I 20 O	34	I 4 I	2 I O	S II	II I	M 9 5
	5 IO	IO 20	2 44	3 I 5	35	I 2	2 5	O 5	13 3	15 7
16	6 40	I 3 12	4 47	I 20 O	33	I 6 I	O O	55	15 4	43 8
	5 20	IO 40	3 42	57 I	18	I 2	I 5	2 6	17 5	46 II
2I	6 3 I	4 I	4 36	I 2 I O	32	I 8 O	4 O I	3 O	19 7	A 20 r. 00
	5 30	II C	3 24	2 40 I	2	I 2	I 5	3 5	21 9	46 2
26	6 2 I	IO 56	4 25	I 2 I O	3 I	I IO O	2 I I	56	23 II	56 II
	5 40	II 20	3 44	2 23 O	48	I 2	O 5	4 6	25 O	M 55 8
								15	27 2	34 8

Sun enters $\times$ 8 d. 3 h. 59' 46 M. appt. Time, Equation
 $+14' 23''$. Sun mea. An. $7''$. 19° . $58'$. 19° . $58'$. $51''$. $42''$.

ROYAL DIARY, or EPHEMERIS.

A. 4d. 5h. A. F.Q. 11d. 7h. A. MARCH. F.M. 18d. 9h. A. L.Q. 26d. 10h. A.

[illegible]

♂ ri. fets apt.	⊙ flow and len. day	Da. br. Da. in.	Lat. N. rises	Lat. S. M. sets	Lat. N. ♂ A.	Lat. N. ♀ rises	Lat. S. ♀ M.	D.	♂ rises & fets.	♀ South.
6h 12	10' 7"	4h 19'	10° N 21'	0° S 30'	1° N 11'	0° N 6'	2° S 9'	1	14 15	9 M 12
5h 49	11h 38'	4h 2'	2h M 8	0h M 36	12h A 0	5h M 0	5h M 54	3	4 59	10 A 46
6 2	8 40	4 18	1 22	0 29	1 12	0 S 12	2 15	5	7 A 11	0 A 22
5 59	11 58	4 22	1 50	0 21	1 59	4 56	5 51	7	9 45	2 6
5 52	7 9	3 57	1 22	0 28	1 13	0 29	2 12	9	Morn.	4 0
6 9	12 18	4 4	1 33	0 7	1 59	4 53	5 48	11	1 15	6 0
5 42	5 35	3 45	1 22	0 27	1 14	0 44	1 56	13	2 49	7 53
6 19	12 38	5 2	1 15	1 A 52	1 58	4 48	5 52	15	3 53	9 37
5 32	4 1	3 33	1 23	0 26	1 15	0 58	1 26	17	4 40	11 14
6 29	12 58	5 22	0 57	1 37	1 57	4 43	5 33	19	rises	Morn.
5 22	2 30	3 20	1 23	0 25	1 16	1 11	0 44	21	8 A 52	1 16
6 39	13 18	5 42	0 37	1 23	1 55	4 36	♂ ⊙ 25	23	1 44	3 12
enters ♀	9 h. 4 h. 36'	30". M. apt.	Time, Equat. + 7					25	0 M 34	4 19
								27	1 53	6 24
								29	2 47	7 56

ROYAL DIARY, or EPHEMERIS.

N. M. 3d. 9h. M. F. Q. 16d. 1h. M. APRIL. F. M. 17d. No. L. Q. 3h. A.

[illegible]

Days.	Ori.		flow and		Da.in.	Lat. N.		Lat. S.		Lat. N.		Lat. S.		Lat. N.	D.	D rifes and fets		South
	fets apt.	len. day	Da.in.	rifes M.		fets A.	fets ♂ A.	rifes ♀ M.	fets ♀ A.	sets A.	rifes M.	sets A.	sets M.			sets A.		
1	5h 10	0' 48"	3h 4	1 N 23	00 S 24	10 N 17	10 S 21	00 N 20	1	4 M 2 r.	10 M 4							
6	5 1	13h 42	6 2	0h M 16	11h A 7	11h A 54	4h M 28	7h A 33	3	fets	10 A 9	2						
6	5 0	0 fa 29	2 51	1 23	0 24	1 17	1 29	1 14	7	Morn.	4							
7	1 14	2 6	26	nh A 53	10h 53	11 51	4 20	8 17	9	0 58	5							
11	4 50	1 37	2 35	1 24	0 23	1 18	1 35	1 59	11	2 4	7 4							
7	11 14	22 6	46	11 34	10 40	11 47	4 12	8 56	13	2 52	9 18							
16	4 40	2 33	2 19	1 24	0 22	1 18	1 39	2 29	15	3 36	10 48							
7	21 14	42 7	6	11 15	10 28	11 43	4 9	24	17	4 26	Morn.							
									19	9 A 45 r	1 11							
21	4 32	3 16	2 2	1 24	0 22	1 18	1 41	2 37	21	11 20	2 58							
7	29 14	58 7	22	10 55	10 15	11 38	3 55	9 39	23	Morn.	4 24							
16	4 23	3 47	1 47	1 24	0 21	1 18	1 39	2 20	25	0 56	5 58							
7	37 15	14 7	38	10 35	10 3	11 32	3 45	9 37	27	1 43	7 24							

☉ enters 8 d. 5 h. 44'. 23". A. ap. T. Equa. 1'. 8". ☉'s
near An. 9 s. 19^h. 40'. 15". 7".

2 61 ROYAL DIARY, or EPHEMERIS.

M. 2d. 6h. A. F.Q. 9d. 9h. M. MAY. F.M. 17d. 3h. M. L.Q. 25d. 5h. M.

☉ in 8	Decl. No.	h in 1	II in II	♂ in 3	♀ in 4	♂ in II	(s Place)	Lat. B.
20 2' 47"	18 18' 46"	23 28'	160 18'	50 12'	260 6'	90 22'	40 8 50'	10 45'
3 0 34	18 33 33	23 24	16 31	5 50	27 19	9 31	19 33 0	25
3 58 21	18 48 0	23 20	16 44	6 27	28 31	9 33	4 II 30 0	A 55
4 56 6	19 2 8	23 17	16 58	7 5	29 44	9 30	19 30 2	15
5 53 49	19 15 57	23 13	17 11	7 42	0 8 56	9 26	4 27 3	24
6 51 30	19 29 23	10 17	25 8	19 2	9 9	20 19	13 4	19
7 49 10	19 42 37	23 6	17 38	8 57	3 22	9 17	3 Ω 40 4	56
8 46 48	19 55 27	23 3	17 52	9 34	4 34	8 46	17 47 5	15
9 44 25	20 7 56	22 59	18 6	10 12	5 46	8 22	1 m 33 5	14
11 42 1	20 20 5	23 55	18 19	10 49	6 59	7 57	14 57 4	57
1 39 37	20 31 53	22 51	18 32	11 26	8 12	7 27	28 2 4	23
2 37 11	20 43 21	22 47	18 46	12 4	9 25	6 56	10 2 3	37
3 34 43	20 54 27	22 43	18 59	12 41	10 37	6 24	23 20 2	42
4 32 14	21 5 12	22 39	19 13	13 19	11 50	5 51	5 m 41 1	40
5 29 44	21 15 34	22 35	19 27	13 56	13 3	5 17	17 48 0	35
6 27 13	21 25 34	22 31	19 40	14 34	14 16	4 44	29 47 0	B 30
7 24 42	21 35 13	22 27	19 54	15 11	15 29	4 11	11 42 1	34
8 22 9	21 44 30	22 22	20 7	15 49	16 42	3 40	23 30 2	34
9 19 35	21 53 23	22 18	20 21	16 26	17 54	3 10	5 20 3	29
10 17 1	22 1 54	22 14	20 34	17 4	19 7	2 41	17 11 4	12
11 14 26	22 10 2	22 9	20 48	17 41	20 20	2 16	29 3 4	44
12 11 50	22 17 48	22 5	21 2	18 18	21 33	1 53	11 3 5	7
1 9 13	22 25 10	22 0	21 16	18 56	22 46	1 34	23 13 5	15
2 6 34	22 32 7	21 56	21 30	19 33	23 59	1 20	5 38 5	9
3 3 55	22 38 42	21 52	21 44	20 11	25 12	1 9	18 21 4	49
4 1 15	22 44 55	21 47	21 57	20 48	26 25	1 3	1 22 4	10
5 58 34	22 50 40	21 43	22 41	21 26	27 38	1 0	14 49 3	19
6 55 53	22 56 3	21 38	22 55	22 3	28 51	1 D.	2 41 2	14
7 53 11	23 1 2	21 34	22 39	22 41	0 II 4	1 7	13 8 3	0
8 50 29	23 5 37	21 30	22 53	23 18	1 17	1 16	27 45 0	A 20
9 47 46	23 9 47	21 26	23 6	23 56	2 30	1 33	12 II 50 1	42

☉ fast	Da. br.	Lat. N.	Lat. S.	Lat. N.	Lat. S.	Lat. N.	☉ rises	☉ sets	South.
and	Da. in.	h	4	♂	♀	♂	and sets		
len. day		rises A.	sets A.	sets A.	rises M.	sets A.			
5 4' 2"	1 23	10 N 25	0 S 21	1 N 18	1 S 37	1 N 27	1 3 M 20	10 M 48	
6 15h 32	7 56	10 A 14	9h A 47	11h A 26	3h M 37	9h A 24	3 9 A 10	0 A 48	
7 4 40	58	1 25	0 20	1 18	1 33	0 30	7 Morn.	4 50	
8 15 46	8 10	9 53	9 33	11 18	3 29	8 56	0 37	6 30	
9 3 51	0 14	1 25	0 19	1 17	1 29	0 S 55	1 23	8 3	
10 15 58	8 22	9 31	9 18	11 10	3 20	7 56	2 6	9 34	
11 3 25	no ni.	1 24	0 19	1 17	1 23	2 20	2 59	11 7	
12 16 14	8 38	9 10	9 3	11 13	13 6	0 15	19 rises	Morn.	
1 2 47	all tw.	1 24	0 18	1 17	1 16	3 rif. 26	21 10 58	3 6	
2 16 24	8 48	8 48	8 48	10 52	3 6	Morn.	23 11 45	4 37	
3 1 59	- - -	1 24	0 17	1 16	1 6	1 25	0 M 5	6 4	
4 16 34	8 58	8 26	8 33	10 42	3 0	3 M 33	27 0 52	7 39	
5 10 5	9d. 6h. 42'. 6".	A. ap. T. Equa.	- 3'. 53".	☉'s			29 1 47	9 26	
6 10 5	200. 15'. 41". 38".						31 3 10	11 28	

ROYAL DIARY, or EPHEMERIS.

N.M. 1d. 1h. M. F.Q. 7d. 5. A. JUN. F.M. 15d. 6. A. L.Q. 23d. 5h. A. N.M. 30d. 8h. M.

D.	☉ in II	Decl. No.	☿ in ♄	♂ in II	♂ in ♄	♀ in II	♀ in II	☿'s Place.	Lat.
1	21° 45' 3"	23° 13' 34"	21° 21'	23° 20'	24° 33'	3° 43'	10° 53'	28° 11' 4"	2° 58'
2	22 42 19	23 16 55	21 17	23 34	25 11	4 56	2 14	13 20 16	3 3
3	23 19 35	23 19 52	21 12	23 47	25 48	6 9	2 39	28 21 4	4 4
4	24 36 50	23 22 24	21 8	24 1	26 26	7 23	3 13	13 2 55	5 5
5	25 34 4	23 24 32	21 3	24 15	27 3	8 36	3 55	27 25 5	6 6
6	26 31 17	23 26 15	20 59	24 29	27 41	9 49	4 40	11 17 4	7 7
7	27 28 30	23 27 33	20 54	24 43	28 18	11 2	5 28	24 43 4	8 8
8	28 25 42	23 28 27	20 50	24 56	28 56	12 15	6 19	7 46 3	9 9
9	29 22 54	23 28 55	20 45	25 10	29 33	13 28	7 12	20 27 2	10 10
10	30 20 6	23 28 59	20 41	25 24	30 11	14 41	8 8	2 47 1	11 11
11	1 17 18	23 28 37	20 37	25 37	0 48	15 54	9 13	14 55 0	12 12
12	2 14 30	23 27 52	20 32	25 51	1 26	17 7	10 20	26 53 0	13 13
13	3 11 42	23 26 41	20 28	26 5	2 3	18 21	11 31	8 48 1	14 14
14	4 8 54	23 25 5	20 24	26 9	2 41	19 34	12 47	20 35 2	15 15
15	5 6 5	23 23 5	20 20	26 32	3 18	20 47	14 3	2 23 3	16 16
16	6 3 16	23 20 12	20 16	26 46	3 56	22 0	15 25	14 15 3	17 17
17	7 0 27	23 17 51	20 12	27 0	4 33	23 14	16 53	26 54 4	18 18
18	7 57 38	23 14 37	20 8	27 13	5 11	24 27	18 23	8 34 5	19 19
19	8 54 48	23 10 58	20 4	27 27	5 48	25 40	19 56	20 9 6	20 20
20	9 51 58	23 6 56	20 0	27 40	6 26	26 54	21 30	2 25 5	21 21
21	10 49 8	23 2 32	19 56	27 54	7 3	28 7	23 7	14 53 4	22 22
22	11 46 19	22 57 39	19 52	28 8	7 41	29 21	24 52	27 33 4	23 23
23	12 43 30	22 52 24	19 48	28 22	8 18	30 34	26 39	10 34 5	24 24
24	13 40 42	22 46 37	19 44	28 35	8 56	1 48	28 27	23 53 6	25 25
25	14 37 54	22 40 43	19 40	28 48	9 33	3 1	30 19	7 36 7	26 26
26	15 35 6	22 34 16	19 37	29 2	10 11	4 1	2 14	21 40 8	27 27
27	16 32 17	22 27 27	19 33	29 15	10 48	5 28	4 10	6 18 9	28 28
28	17 29 29	22 20 14	19 29	29 28	11 26	6 42	6 8	21 13 0	29 29
29	18 26 42	22 12 38	19 26	29 42	12 3	7 55	8 10	6 23 1	30 30
30	19 23 54	22 4 39	19 22	29 55	12 41	9 9	10 16	21 39 2	31 31

Days.	☉ rif. sets apt.	☉ fast and len. day	Da. br. Da. in.	Lat. N. h	Lat. S. 14	Lat. N. ♂	Lat. S. ♀	Lat. S. ♀	D. rif. & sets
1	3h 40'	0' 50"		1° N 24'	0h S 17'	10° N 16'	00° S 54'	40° S 8'	1 sets
8	20 16h 40'	9 4	8h A 0	♂ ☉ 3	roha 28	zhM 55	3hM 11		3 10 A 6
6	3 29	0 10. 12	no ni.	1 23	0 16	1 16	0 42	3 44	5 11 24
8	21 16 42	9 6	sets.	3hM 42	10 16	2 51	2 53		7 11 54
11	3 38	1 16	all tw.	1 23	0 16	1 15	0 30	3 2	9 0 M 7
18	8 22	16 44	9 8	3hM 16	3 27	10 4	2 50	2 44	10 0 58
16	3 39	2 20	D. de.	1 22	0 15	1 14	0 18	2 7	11 2 5
8	21 16 42	oh 2'	2 53	3 11	9 52	2 50	2 37		12 4 5
21	3 41	3 19		1 22	0 15	1 13	0 5	1 5	13 6 5
8	19 16 38	0 6	2 37	2 54	9 39	2 52	2 38		14 8 5
26	3 44	4 12		1 21	0 14	1 12	0 N 6	0 3	15 10 25
8	15 16 30	0 14	2 10	2 38	9 26	2 58	2 49		16 11 12
29	2 48								17 8 A 56
29	2 48								18 9 46
29	2 48								19 10 25
29	2 48								20 11 12
29	2 48								21 Morn.
29	2 48								22 0 57
29	2 48								23 2 48

☉ enters ♄ 10 d. 3 h. 43'. 18". M. ap. T. Equa. + 1'. 10".

☉'s mea. An. 11 s. 21° 22' 22" 40".

8h.M

LatA

11. 5

enters Ω 11d. 2h. 42'. 9". A. ap. T. Equa. + 5'. 53".
ea. An. os. 22'. 11'. 50". 44".

ROYAL DIARY, or EPHEMERIS.

F. Q. 5d. 8h. A. F. M. 13d. 11h. N. AUGUST. L. Q. 21d. 8h. M. N. M. 27d. M.

D.	° in Ω	Decl. N.	h in ♀	Min ☾	♂ in ♀	♀ in Ω	♂ in ♀	♂'s Pl.	Lat.
1	20° 0' 40"	14° 50' 22"	18	8'	60 38	2' 53	18° 33'	11° 20'	28° 30'
2	20 58 20	14 32 56	18	7	6 49	3 31	19 47	12 51	12 43
3	21 56 2	14 13 22	18	6	7 1	4 9	21 2	14 20	25 11
4	22 53 46	13 54 35	18	5	7 12	4 47	22 16	15 48	7 m 53
5	23 51 31	13 35 24	18	5	7 24	5 25	23 30	17 15	20 18
6	24 49 18	13 16 19	18	4	7 35	6 4	24 44	18 41	2 21
7	25 47 6	12 56 53	18	4	7 46	6 42	25 59	20 4	14 16
8	26 44 55	12 37 14	18	4	7 58	7 20	27 13	21 25	26 73
9	27 42 46	12 17 23	18	4	8 9	7 58	28 27	22 45	7 54
10	28 40 39	11 57 20	18 D	4	8 20	8 46	29 41	24 4	10 50
11	29 38 34	11 37 6	18	4	8 31	9 14	30 56	25 22	1 50
12	30 36 30	11 16 40	18	4	8 42	9 52	2 10	26 39	13 59
13	1 34 27	10 56 4	18	4	8 53	10 30	3 24	27 52	26 16
14	2 32 26	10 35 7	18	5	9 3	11 9	4 30	29 3	8 X 48
15	3 30 26	10 14 21	18	5	9 13	11 47	5 53	30 11	21 30
16	4 28 27	9 53 14	18	6	9 20	12 25	7 8	1 17	4 Y 26
17	5 26 30	9 31 59	18	6	9 34	13 4	8 22	2 20	17 30
18	6 24 35	9 10 33	18	7	9 44	13 42	9 37	3 22	0 8 49
19	7 22 42	8 49 6	18	7	9 54	14 21	10 52	4 22	14 15
20	8 20 51	8 27 18	18	8	10 4	14 59	12 6	5 20	27 57
21	9 19 0	8 5 25	18	9	10 14	15 38	13 20	6 17	11 II 50
22	10 17 13	7 43 29	18	10	10 42	16 16	14 35	7 11	25 59
23	11 15 27	7 21 21	18	11	10 34	16 55	15 49	8 1	10 10
24	12 13 43	6 59 9	18	12	10 43	17 33	17 4	8 45	24 55
25	13 12 1	6 36 49	18	13	10 52	18 12	18 18	9 25	9 26
26	14 10 21	6 14 23	18	14	11 2	18 50	19 33	10 1	24 05
27	15 8 43	5 51 48	18	15	11 11	19 20	20 47	10 35	8 m 31
28	16 7 7	5 29 9	18	16	11 20	20 7	22 2	11 6	23 42
29	17 5 32	5 6 25	18	17	11 29	20 46	23 16	11 34	6 37
30	18 3 58	4 43 36	18	18	11 38	21 24	24 31	11 49	20 42
31	19 2 26	4 20 41	18	19	11 46	22 3	25 45	12 0	3 m 8

Days.	☉ rī.		☉ flow		Da. br.	♂		♂		♀		D.	☿ rīses	
	fets	and	ap.	len. day.		Lat. N.	Lat. S.	Lat. N.	Lat. N.	Lat. N.	Lat. N.		& fets	Scor.
1	4h 36	4 34	2h 6'	1 N 15	0 S 12	10 N 5	1° N 15	0 N 22	3	9	34	18	12	2.5
	7 24	14h 48	1h 56	11h 37	0h M 8	7h A 49	4h M 27	8h A 1	5	10	55	10	5	5
6	4 44	3 38	2 23	1 I 15	0 I 11	1 4	1 20	0 S 19	7	11	30	7	11	30
	7 15	14 30	2 14	11 18	0 36	7 36	6 06 th	7 51	9	0	M 40	8	9	8
11	4 54	2 30	2 38	1 I 13	0 I 11	1 2	1 23	1 4	11	2	20	10	2	10
	7 5	14 10	2 34	11 0	0 2	7 24	fets	7 38	13	rīses	11	5	11	5
16	5 3	1 11	2 53	1 I 12	0 10	1 1	1 24	1 50	15	7	A 5	0	16	0
	6 56	13 52	2 52	10 41	0 8	7 11	7 A 5	7 34	17	7	53	2	17	53
21	5 13	0 18f	3 7	1 I 11	0 10	0 59	1 25	2 35	19	8	56	3	19	8
	6 46	13 32	3 12	10 23	11 A 51	6 59	6 58	7 7	21	10	30	5	21	10
26	5 23	1 54	3 21	1 I 10	0 9	0 57	1 23	3 16	23	Morn.	7	4	23	7
	6 26	13 12	3 32	10 5	11 37	6 46	6 50	6 52	25	2	4	9	25	2
									27	fets	11	11	27	11

⊙ enters ♍ 11d. 8h. 59'. 29". A. ap. T. Equa. + 1'. 16"
⊙'s mea. A. is. 230.0'. 22". 11".

N.M. 7d. N°. F. Q. 15d. 9h. M. OCTOBER. F.M. 23d. 1h. M. L.Q. 20d. 8h.

D.	☉ in ♈	Decl. S.	♂ in ♋	♀ in ♌	♂ in ♍	♀ in ♎	♂ in ♏	(°'s Pl.)
1	8 ^o 38' 57"	3 ^o 26' 45"	19 ^o 20'	14 ^o 13'	5 ^o 2'	20 ^o 39'	28 ^o 18'	21 ^o 54'
2	9 38 8	3 49 28	19 24	14 19	5 41	21 54	27 41	5 51
3	10 37 22	4 12 46	19 28	14 25	6 20	23 8	27 12	19 30
4	11 36 38	4 36 0	19 32	14 31	7 0	24 23	26 59	3 m 44
5	12 35 56	4 59 11	19 34	14 36	7 39	25 38	27 D 10	17 39
6	13 35 15	5 22 18	19 40	14 41	8 18	26 52	27 15	1 27
7	14 34 36	5 45 20	19 44	14 46	8 58	28 7	27 39	14 58
8	15 34 0	6 8 20	19 48	14 51	9 37	29 21	28 9	28 12
9	16 33 26	6 31 13	19 52	14 55	10 16	om 36	28 47	11 m 70
10	17 32 54	6 54 2	19 57	14 59	10 55	1 51	29 35	23 43
11	18 32 25	7 16 45	20 1	15 3	11 35	3 6	om 30	6 f 51
12	19 31 58	7 39 22	10 6	15 7	12 14	4 21	1 31	18 11
13	20 31 32	8 1 54	20 11	15 11	12 54	5 35	2 45	0 b 93
14	21 31 7	8 24 17	20 15	15 14	13 33	6 50	4 1	12 14
15	22 30 44	8 46 34	20 20	15 18	14 18	8 5	5 19	23 51
16	23 30 22	9 8 42	20 25	15 22	14 51	9 19	6 40	5 m 49
17	24 30 2	9 30 43	20 30	15 25	15 31	10 34	8 3	17 56
18	25 29 44	9 52 35	20 35	15 28	16 10	11 49	9 30	0 X 14
19	26 29 29	10 14 19	20 40	15 31	16 50	13 3	11 1	12 48
20	27 29 16	10 35 54	20 45	15 34	17 30	14 8	12 36	25 43
21	28 29 6	10 57 20	20 50	15 36	18 10	15 33	14 12	8 v 58
22	29 28 58	11 18 36	20 55	15 38	18 50	16 48	15 40	22 33
23	m 28 51	11 39 43	21 0	15 40	19 30	18 3	17 26	6 8 25
24	1 28 46	12 0 36	21 6	13 42	20 10	19 17	19 4	20 31
25	2 28 43	12 21 20	21 11	15 44	20 50	20 32	20 43	4 II 50
26	3 28 42	12 41 53	21 16	15 45	21 30	21 46	22 23	19 10
27	4 28 43	13 2 13	21 22	15 46	22 10	23 1	24 3	3 5 35
28	5 28 45	13 22 21	21 27	15 47	22 50	24 16	25 44	17 54
29	6 28 49	13 42 16	21 33	15 48	23 30	25 31	27 23	2 5 75
30	7 28 55	14 1 59	21 39	15 49	24 10	26 46	29 1	16 14
31	8 29 3	14 21 28	21 45	15 49	24 50	28 1	om 38	0 m 95

Days.	⊙ 1 fet s apt .	⊙ flow and len. day.	Da. br. day de.	h Lat. N. sets A.	4 Lat. S. rifes A.	♂ Lat. N. rifes M.	♀ Lat. N. sets A.	♀ Lat. S. rifes M.	D. sets	rifef & fetes
1	6h 13 5 64	10 ^o 23 11h 32	4h 21 5 12	1 N 6 8 A 36	0 ^o 7 10h 19	0 ^o N 48 5h M 54	0 ^o N 51 6h A 47	0 ^o S 23 rifes M.	3 5	2 A 07 1 M 17
6	6 23 5 36	11 53 11 12	4 31 5 32	1 5 8 19	0 7 10 22	0 47 5 54	0 41 6 0	1 N 0 4 M 50	9	7 fetes 6 A 20
11	6 33 5 26	13 13 10 52	4 41 5 52	1 4 8 1	0 6 9 4	0 45 5 55	0 30 5 52	1 48 4 51	11 13	7 35 9 17
16	6 43 5 16	14 22 10 32	4 51 6 12	1 3 7 44	0 6 9 28	0 43 5 5	0 18 5 44	2 3 5 9	3 19	0 M 19 9 32
21	6 53 5 6	15 15 10 12	5 0 6 32	1 2 7 26	0 5 9 10	0 41 5 55	0 6 5 37	1 55 5 30	21 23	4 54 rifef
26	7 3 4 56	15 52 0 52	5 9 6 52	1 1 7 9	0 5 8 52	0 38 5 55	0 S 7 5 32	1 34 6 1	25 127	6 A 38 8 44

☉ enters ♍ 23d. oh. 44'. 39". M. ap. T. Equa. — 15'. 34"

☉'s mea. A. 3s. 23°. 16'. 13". 29".

ROYAL DIARY, or EPHEMERIS.

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1.6d.2h.M. F.Q.14d.5h.M. NOVEMB. F.M. 21d. 1h.A. L.Q.28d.4h.M.

Pl. Lat.	☉ in m	Decl. So.	h in ♀	☿ in ♂	♂ in ♀	♀ in m	♄ in m	(s Pl.	Lat. A
540	9° 29' 13"	14° 40' 44"	21 ⁸ 51	15° 08' 49	25° 30'	29° 15'	2° 18'	13° m 53	4° 39'
18	10 29 26	14 59 48	21 57	15 49	26 10	0 30	3 57	27 28	3 54
30	11 29 40	15 18 30	22 3	15 49	26 50	1 45	5 36	10 49	3 0
44	12 29 58	15 37 1	22 9	15 48	27 31	3 0	7 14	23 55	1 56
39	13 30 17	15 55 17	22 15	15 47	28 11	4 14	8 51	6 m 48	0 45
27	14 30 37	15 13 17	22 21	15 46	28 51	5 29	10 28	19 27	0 B 24
58	15 31 0	16 31 17	22 27	15 45	29 31	6 43	12 5	1 53	1 30
12	16 31 24	16 48 28	22 33	15 44	om 11	7 58	13 42	14 6	2 34
70	17 31 48	17 5 37	22 40	15 43	0 51	9 12	15 18	26 8	3 29
43	18 32 16	17 22 29	22 46	15 42	1 32	10 27	16 4	8 15	4 14
51	19 32 44	17 39 3	22 50	15 41	2 12	11 42	18 30	19 58	4 48
112	20 33 14	17 55 18	22 58	15 39	2 53	12 55	20 6	1 50	5 10
93	21 33 45	18 11 15	23 5	15 37	3 33	14 10	21 42	13 44	5 18
14	22 34 18	18 26 51	23 11	15 35	4 14	15 25	23 17	25 48	5 12
514	23 34 53	18 42 10	23 18	15 32	4 54	16 39	24 52	8 2	4 53
49	24 35 29	18 57 8	23 24	15 30	5 35	17 54	26 26	20 3	4 19
56	25 36 7	19 11 46	23 31	15 27	6 15	19 9	28 1	3 30	3 32
14	26 36 46	19 26 3	23 37	15 24	6 56	20 24	29 35	16 48	2 32
48	27 37 26	19 39 58	23 43	15 20	7 37	21 38	1 9	0 8	1 22
43	28 38 7	19 53 33	23 50	15 17	8 17	22 53	2 43	14 37	0 4
58	29 38 50	20 6 45	23 57	15 13	8 58	24 7	4 16	29 5	1 A 17
33	30 39 34	20 19 35	24 3	15 9	9 39	25 22	5 50	13 49	2 33
20	31 40 20	20 32 2	24 10	15 5	10 20	26 36	7 23	28 41	3 39
310	32 41 7	20 44 7	24 17	15 1	11 0	27 51	8 56	13 32	4 30
50	33 41 55	20 55 49	24 23	15 56	11 41	29 5	10 29	28 15	5 1
102	4 42 45	21 7 6	24 30	14 52	12 22	0 20	12 2	12 43	5 16
33	5 43 36	21 18 1	24 37	14 47	13 2	1 34	13 34	26 57	5 9
54	6 44 28	21 28 31	24 44	14 42	14 43	2 49	15 8	10 48	4 40
75	7 45 21	21 38 35	24 50	14 37	15 24	4 3	16 42	24 21	4 5
14	8 46 15	21 48 16	24 57	14 31	16 5	5 18	18 16	7 38	3 12

ori.	☉ flow	Lat. N.	Lat. S.	Lat. N.	Lat. S.	Lat. N.	D.	risef	South.
fets	and	Da. br.	☿	♂	♀	♄		and fets	
apt.	len. day	Da. de.	fets A.	rise A.	risef M.	fets A.	risef M.		
h 15	16' 13"	5h 17'	10N 1	00 4'	0° N 36'	0° S 20	1° N 5	3 4 11	0 A 29
46	9 28	7 16	6h A 52	8h A 33	5h M 54	5h A 29	6h M 32	5 6 30	2 27
24	16 8	5 24	1 0	3 0	34 0	33 0	32	7 5 A 3	4 1
35	9 10	7 34	6 34	8 13	5 54	5 25	6 59	9 7 9	5 1
33	15 41	5 33	1 0	3 0	31 0	48 0	S 11	11 9 4	6 1
27	8 54	7 50	6 12	7 48	5 52	5 23	7 38	13 11 10	5 5
41	14 55	5 39	0 59	0 20	28 1	0 0	41	15 0 M 16	7 2
18	8 36	8 8	5 53	7 26	5 51	5 23	13 0	17 2 30	8 5
48	13 46	5 45	0 58	0 10	26 1	10 1	11	19 4 58	10 3
11	8 22	8 22	5 35	7 45	5 50	5 26	fets A.	21 rises	Morn.
54	12 18	5 51	0 57	0 10	23 1	20 1	37	23 6 A 22	1 3
5	8 10	8 34	5 16	6 41	5 49	5 30	4 A 14	25 8 54	3 3
								27 11 28	5 2
								29 0 M 44	7

enters ♀ 21 d. 8 h. 35'. 21". A. ap. T. Equa. — 13'. 34".
mean An. 4 s. 22°. 40'. 9". 3".

N.M. 5 d. 8 h. N.F.Q. 13 d. Mid. DECEMBER. F.M. 20 d. Mid. L.Q. 27 d. 4 h. A.

D.	☉ in ♀	Decl. So.	♂ in ♀	♂ in ♂	♂ in ♀	♀ in ♀	♀ in ♂	☾'s Place.	Lat.
1	0° 47' 11"	21° 57' 33"	25° 41'	14° 25'	16° 47'	60° 32'	19° 50'	20° 38'	12° 11'
2	10 48 8	22 6 21	25 11	14 20	16 28	7 47	21 24	3 m	20 1
3	11 49 6	22 14 46	25 18	14 14	17 10	9 1	22 57	15	54 0 B
4	12 50 5	22 22 45	25 25	14 8	17 51	10 16	24 29	28	16 1
5	13 51 5	22 30 17	25 32	14 2	18 32	11 30	26 2	10 ♀	29 2
6	14 52 6	22 37 23	25 39	13 55	19 13	12 45	27 33	22	34 3
7	15 53 7	22 44 2	25 46	13 49	19 55	13 59	29 4	4 ♀	36 3
8	16 54 8	22 50 15	25 53	13 43	20 36	15 14	31 16	35	24 4
9	17 55 10	22 56 0	26 0	13 36	21 17	16 28	2 7	28	16 4
10	18 56 13	23 1 18	26 7	13 30	21 59	17 43	3 38	10	8 5
11	19 57 17	23 6 8	26 14	13 23	22 40	18 57	5 10	22	2 5
12	20 58 22	23 10 31	26 21	13 16	23 21	20 11	6 41	4 X	5 4
13	21 59 28	23 14 27	26 28	13 9	24 3	21 25	8 12	16	16 4
14	23 0 34	23 17 54	26 35	13 1	24 44	22 40	9 41	28	4 3
15	24 1 41	23 20 53	26 42	12 54	25 26	23 54	11 9	11 ♀	29 2
16	25 2 48	23 23 25	26 49	12 47	26 7	25 8	12 35	24	40 1
17	26 3 56	23 25 29	26 56	12 40	26 49	26 22	14 0	8 8	18 0
18	27 5 4	23 27 3	27 3	12 32	27 30	27 30	15 25	22	23 0 A
19	28 6 13	23 28 11	27 10	12 24	28 12	28 50	16 48	6 II	58 2
20	29 7 22	23 28 49	27 17	12 17	28 53	0 4	18 8	21	55 3
21	♂ 8 31	23 29 0	27 24	12 9	29 35	1 18	19 26	7 ☽	0 4
22	1 9 40	23 28 41	27 31	12 1	0 ♀ 17	2 32	20 40	22	22 4
23	2 10 49	23 27 55	27 38	11 53	0 58	3 46	21 48	7 ♀	30 5
24	3 11 58	23 26 40	27 45	11 45	1 40	5 0	22 52	22	26 5
25	4 13 8	23 24 57	27 52	11 37	2 22	6 14	23 54	6 ♀	49 4
26	5 14 19	23 22 46	27 59	11 29	3 4	7 28	24 48	20	50 4
27	6 15 30	23 20 6	28 6	11 21	3 46	8 42	25 33	4 ☽	24 3
28	7 16 41	23 13 58	28 13	11 13	4 28	9 56	26 11	17	24 2
29	8 17 52	23 12 22	28 20	11 5	5 10	10 10	26 43	0 m	24 1
30	9 19 4	23 9 19	28 27	10 57	5 52	11 23	27 5	12	53 0
31	10 20 15	23 4 48	28 34	10 48	6 34	12 27	27 18	25	14 1 B

Days.	☉ ri. sets apt.	☉ fast and len. day	Da. br. Da. de.	Lat. N. ♂ sets A.	Lat. S. ♂ rises A.	Lat. N. ♂ rises M.	Lat. S. ♀ sets A.	Lat. S. ♀ sets A.	D.	☾ rises and sets	South
1	8 h 0	10° 32'	5h 54'	0° N 57	0° 0	0° N 20	1° S 29	1° S 58	1	3 M 5r	10 M 5r
2	3 59	7h 58	8 46	4 A 57	6h A 17	5h M 47	5h A 36	4h A 20	3	5 24	0 A 4
3	6 8 5	8 29	5 57	0 57	0 N 10	18 1	37 1	12	5	sets	2 46
4	3 54	7 48	8 56	4 37	5 53	5 46	5 44	37	7	5 A 47	4 10
5	8 9	6 14	6 00	57 0	10	15 1	43 2	16	9	7 46	5 12
6	3 51	7 42	9 24	17 5	28 5	44 5	55 4	42	11	9 52	7 10
7	16 8 11	3 50	6 10	56 0	20	12 6	47 2	7	13	12 0	8 50
8	3 49	7 38	9 6	3 57	5 25	40 6	7 4	58	15	1 M 8	11 1
9	1 12	1 20	6 10	56 0	30	9 1	49 1	40	17	3 34	0 M 1
10	h. 3 48	7 36	9 8	6 18	4 37	5 37	6 19	5	19	5 59	3 0
11	46 8 11	1 10	6 00	56 0	40	5 1	49 0	48	21	4 A 59r	4 30
12	3 49 7	38 8. in. c	rises	4 12	5 35	6 32	5 28	27	23	7 38	5 40
13	☉ enters ♀ 21 d. 8 h. 39'. 19". M. ap. T Equa. — 1'. 8".								25	10 15	7 30
14	☉'s mea. An. 55. 210. 45'. 20". 16".								27	1 Morn.	8 40
15									29	1 52	10 40
16									31	4 12	11 10

The Immersions and Emersions of Jupiter's first Satellite, reduced to Apparent Time, for 1752.

Emersions.				Emersions.				Immersions.				Immersions.				Immersions.			
January.				March.				July.				September.				November.			
D.	H.	M.	S.	D.	H.	M.	S.	D.	H.	M.	S.	D.	H.	M.	S.	D.	H.	M.	S.
2	20	52	31	1	6	44	1	1	7	38	16	1	6	24	42	2	5	10	26
4	15	20	46	3	1	13	23	3	2	6	14	3	0	52	45	3	23	38	35
6	9	48	56	4	19	42	46	4	20	35	0	4	19	22	48	5	18	6	34
8	4	17	12	6	14	12	7	6	5	3	23	6	13	51	48	7	12	34	45
9	22	45	30	8	8	41	28	8	9	31	48	8	8	20	50	9	7	2	47
11	17	14	51	10	3	10	52	10	4	0	15	10	2	49	53	11	1	30	46
13	11	42	14	11	21	40	11	11	22	28	43	11	21	18	55	12	19	58	42
15	6	10	29	13	16	9	39	13	16	57	13	13	15	47	54	14	14	26	38
17	0	38	55	15	10	39	2	15	11	25	44	15	10	16	56	16	8	54	31
18	19	7	27	17	5	8	25	17	5	54	15	17	4	5	46	18	3	22	20
20	13	36	5	18	23	37	48	19	0	22	50	18	23	15	58	19	21	50	10
22	7	54	43	20	18	7	11	20	18	51	26	20	17	43	56	21	16	45	41
24	2	23	23	22	12	36	32	22	13	20	3	22	12	12	54	23	10	45	41
25	20	52	4	24	7	5	53	24	20	48	4	24	6	41	50	25	5	13	24
27	15	30	50	26	1	35	14	26	2	17	23	26	1	10	42	26	23	41	6
29	9	59	39	27	20	4	33	27	20	46	7	27	19	39	36	28	18	8	49
31	4	28	30	29	14	33	50	29	15	14	51	29	14	8	41	30	12	36	29
				31	9	3	9	30	22	40	33								
February.				April.				August.				October.				December.			
1	22	57	21	2	3	32	24	2	4	12	26	1	8	37	17	2	7	4	14
3	17	26	16	3	22	1	41	3	22	41	13	3	3	5	52	4	1	31	50
5	11	55	5	5	16	30	53	5	17	9	45	4	21	34	52	5	19	59	32
7	6	24	15	7	11	0	7	7	11	38	56	6	16	3	5	7	14	27	13
9	0	53	26	9	5	29	17	9	6	7	48	8	10	32	20	9	8	54	32
10	19	22	20	10	23	58	26	11	0	36	42	10	5	1	0	11	3	22	30
12	13	51	25	12	18	27	32	12	19	5	38	11	23	20	30	12	21	50	12
14	8	20	37	14	12	56	37	14	13	34	33	13	17	58	16	14	16	17	53
16	2	49	46	16	7	25	41	16	8	3	30	15	12	26	53	16	10	45	36
17	21	19	0	18	1	54	43	18	2	32	29	17	6	55	26	18	5	13	19
19	15	48	14	19	20	23	41	19	21	1	28	19	1	23	57	19	23	41	2
21	10	17	30	21	14	52	40	21	15	30	28	20	19	52	26	Emersions			
23	4	46	48	23	9	21	34	23	9	59	31	22	14	20	51	8 24 10th			
24	23	16	15	25	3	50	37	25	4	28	32	24	8	49	14	at 10 at Night			
26	17	45	22	26	22	19	24	26	22	57	34	26	3	17	35	21	20	23	36
28	12	14	41	28	16	48	14	27	17	26	37	27	21	45	52	23	14	51	23
				30	11	17	3	30	11	55	45	29	16	14	5	25	9	19	16
				8 24 3 June								31	10	36	18	27	3	47	1
																28	22	15	c
																30	16	42	56

The Immersions of Jupiter's first Satellite for May and June this Year, are designedly omitted; because Jupiter being then so near the Sun, they can scarcely be seen, and would be of little Use.

N. B. Eleven Days must be added after the 2d Day of September.

A TABLE showing
the Prime, or Gol-
den Number for
the Years of Christ
by R. Heatb.

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
1	20	39	58	77	96	2	7	12	17	3	8	13	18	4	9	14	19	5	10	15
2	21	40	59	78	97	3	8	13	18	4	9	14	19	5	10	15	1	6	11	16
3	22	41	60	79	98	4	9	14	19	5	10	15	1	6	11	16	2	7	12	17
4	23	42	61	80	99	5	10	15	1	6	11	16	2	7	12	17	3	8	13	18
5	24	43	62	81		6	11	16	2	7	12	17	3	8	13	18	4	9	14	19
6	25	44	63	82		7	12	17	3	8	13	18	4	9	14	19	5	10	15	1
7	26	45	64	83		8	13	18	4	9	14	19	5	10	15	1	6	11	16	2
8	27	46	65	84		9	14	19	5	10	15	1	6	11	16	2	7	12	17	3
9	28	47	66	85		10	15	1	6	11	16	2	7	12	17	3	8	13	18	4
10	29	48	67	86		11	16	2	7	12	17	3	8	13	18	4	9	14	19	5
11	30	49	68	87		12	17	3	8	13	18	4	9	14	19	5	10	15	1	6
12	31	50	69	88		13	18	4	9	14	19	5	10	15	1	6	11	16	2	7
13	32	51	70	89		14	19	5	10	15	1	6	11	16	2	7	12	17	3	8
14	33	52	71	90		15	1	6	11	16	2	7	12	17	3	8	13	18	4	9
15	34	53	72	91		16	2	7	12	17	3	8	13	18	4	9	14	19	5	10
16	35	54	73	92		17	3	8	13	18	4	9	14	19	5	10	15	1	6	11
17	36	55	74	93		18	4	9	14	19	5	10	15	1	6	11	16	2	7	12
18	37	56	75	94		19	5	10	15	1	6	11	16	2	7	12	17	3	8	13
19	38	57	76	95		1	6	11	16	2	7	12	17	3	8	13	18	4	9	14

EXAMPLE. *What is the Golden Number for the Year 1752?* Under 1700 at Top, and against 52 on the Left-hand, among the Columns for Years above Hundreds, you will find 5 for the Golden Number required; the same to be observed any other Year. *To prove the foregoing Table.* The Golden Number was 2 in the first Year of Christ, therefore if to the present Year 1 be added, and the Sum divided by 19, the Remainder will be the Golden Number for that Year.

A TABLE for finding the Number of Days from any Day in any Month to the same Day in any other Month in the same or next Year, by Inspection.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Jan.	365	334	306	275	245	214	184	153	122	92	61	31
Feb.	31	305	337	306	276	245	215	184	153	123	92	62
Mar.	59	28	365	334	304	273	243	212	181	151	120	90
Apr.	90	59	31	365	335	304	274	243	212	182	151	121
May	120	89	61	30	365	334	304	273	243	212	181	151
June	151	120	92	61	31	365	335	304	273	243	212	182
July	181	150	122	91	61	30	365	334	303	273	242	212
Aug.	212	181	153	122	92	61	31	365	334	304	273	243
Sept.	243	212	184	153	123	92	62	31	365	335	304	274
Oct.	273	242	214	183	153	122	92	61	30	365	334	304
Nov.	304	273	245	214	184	153	123	92	61	31	365	335
Dec.	334	303	275	244	214	183	153	122	91	61	30	305

U S E. From the 1, 15, or 20th of May (at the Top-Column) to the 1, 15, or 20th of December following in an Angle meeting that Month against the Side, 214 Days. &c. Add a Day in Leap-Year, when Feb. intervenes.

A very useful TABLE, compos'd by the Right Honourable GEORGE Earl of MACCLESFIELD, shewing, by the Golden Numbers, on what Days of the Month the Paschal Limits, or Full Moons have happened, or will hereafter happen, for ascertaining of Easter, according to the Gregorian Account, from the Reformation of the Calendar, in the Year 1582, to the Year 4199, inclusive.

Golden Numbers from the Year 1583 to 1699, and so on to 4199, inclusive.												Paschal Full Days of Month.	Sunday Let.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1583	1700	1900	2199	2299	2399	2400	2500	2600	2999	3100	3400	3500	3600	3700	3800	4100	Mar. 21	22	23	24	25	26	27	28	29	30	31	Apr. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
3	11	19	7	15	23	31	3	11	19	27	35	3	11	19	27	35	4	12	20	28	36	4	12	20	28	36	4	12	20	28	36	5	13	21	29	37	5	13	21	29	37	6	14	22	30	38	7	15	23	31	39	8	16	24	32	40	9	17	25	33	41	10	18	26	34	42	11	19	27	35	43	12	20	28	36	44	13	21	29	37	45	14	22	30	38	46	15	23	31	39	47	16	24	32	40	48	17	25	33	41	49	18	26	34	42	50	19	27	35	43	51	20	28	36	44	52	21	29	37	45	53	22	30	38	46	54	23	31	39	47	55	24	32	40	48	56	25	33	41	49	57	26	34	42	50	58	27	35	43	51	59	28	36	44	52	60	29	37	45	53	61	30	38	46	54	62	31	39	47	55	63	32	40	48	56	64	33	41	49	57	65	34	42	50	58	66	35	43	51	59	67	36	44	52	60	68	37	45	53	61	69	38	46	54	62	70	39	47	55	63	71	40	48	56	64	72	41	49	57	65	73	42	50	58	66	74	43	51	59	67	75	44	52	60	68	76	45	53	61	69	77	46	54	62	70	78	47	55	63	71	79	48	56	64	72	80	49	57	65	73	81	50	58	66	74	82	51	59	67	75	83	52	60	68	76	84	53	61	69	77	85	54	62	70	78	86	55	63	71	79	87	56	64	72	80	88	57	65	73	81	89	58	66	74	82	90	59	67	75	83	91	60	68	76	84	92	61	69	77	85	93	62	70	78	86	94	63	71	79	87	95	64	72	80	88	96	65	73	81	89	97	66	74	82	90	98	67	75	83	91	99	68	76	84	92	100	69	77	85	93	101	70	78	86	94	102	71	79	87	95	103	72	80	88	96	104	73	81	89	97	105	74	82	90	98	106	75	83	91	99	107	76	84	92	100	108	77	85	93	101	109	78	86	94	102	110	79	87	95	103	111	80	88	96	104	112	81	89	97	105	113	82	90	98	106	114	83	91	99	107	115	84	92	100	108	116	85	93	101	109	117	86	94	102	110	118	87	95	103	111	119	88	96	104	112	120	89	97	105	113	121	90	98	106	114	122	91	99	107	115	123	92	100	108	116	124	93	101	109	117	125	94	102	110	118	126	95	103	111	119	127	96	104	112	120	128	97	105	113	121	129	98	106	114	122	130	99	107	115	123	131	100	108	116	124	132	101	109	117	125	133	102	110	118	126	134	103	111	119	127	135	104	112	120	128	136	105	113	121	129	137	106	114	122	130	138	107	115	123	131	139	108	116	124	132	140	109	117	125	133	141	110	118	126	134	142	111	119	127	135	143	112	120	128	136	144	113	121	129	137	145	114	122	130	138	146	115	123	131	139	147	116	124	132	140	148	117	125	133	141	149	118	126	134	142	150	119	127	135	143	151	120	128	136	144	152	121	129	137	145	153	122	130	138	146	154	123	131	139	147	155	124	132	140	148	156	125	133	141	149	157	126	134	142	150	158	127	135	143	151	159	128	136	144	152	160	129	137	145	153	161	130	138	146	154	162	131	139	147	155	163	132	140	148	156	164	133	141	149	157	165	134	142	150	158	166	135	143	151	159	167	136	144	152	160	168	137	145	153	161	169	138	146	154	162	170	139	147	155	163	171	140	148	156	164	172	141	149	157	165	173	142	150	158	166	174	143	151	159	167	175	144	152	160	168	176	145	153	161	169	177	146	154	162	170	178	147	155	163	171	179	148	156	164	172	180	149	157	165	173	181	150	158	166	174	182	151	159	167	175	183	152	160	168	176	184	153	161	169	177	185	154	162	170	178	186	155	163	171	179	187	156	164	172	180	188	157	165	173	181	189	158	166	174	182	190	159	167	175	183	191	160	168	176	184	192	161	169	177	185	193	162	170	178	186	194	163	171	179	187	195	164	172	180	188	196	165	173	181	189	197	166	174	182	190	198	167	175	183	191	199	168	176	184	192	200	169	177	185	193	201	170	178	186	194	202	171	179	187	195	203	172	180	188	196	204	173	181	189	197	205	174	182	190	198	206	175	183	191	199	207	176	184	192	200	208	177	185	193	201	209	178	186	194	202	210	179	187	195	203	211	180	188	196	204	212	181	189	197	205	213	182	190	198	206	214	183	191	199	207	215	184	192	200	208	216	185	193	201	209	217	186	194	202	210	218	187	195	203	211	219	188	196	204	212	220	189	197	205	213	221	190	198	206	214	222	191	199	207	215	223	192	200	208	216	224	193	201	209	217	225	194	202	210	218	226	195	203	211	219	227	196	204	212	220	228	197	205	213	221	229	198	206	214	222	230	199	207	215	223	231	200	208	216	224	232	201	209	217	225	233	202	210	218	226	234	203	211	219	227	235	204	212	220	228	236	205	213	221	229	237	206	214	222	230	238	207	215	223	231	239	208	216	224	232	240	209	217	225	233	241	210	218	226	234	242	211	219	227	235	243	212	220	228	236	244	213	221	229	237	245	214	222	230	238	246	215	223	231	239	247	216	224	232	240	248	217	225	233	241	249	218	226	234	242	250	219	227	235	243	251	220	228	236	244	252	221	229	237	245	253	222	230	238	246	254	223	231	239	247	255	224	232	240	248	256	225	233	241	249	257	226	234	242	250	258	227	235	243	251	259	228	236	244	252	260	229	237	245	253	261	230	238	246	254	262	231	239	247	255	263	232	240	248	256	264	233	241	249	257	265	234	242	250	258	266	235	243	251	259	267	236	244	252	260	268	237	245	253	261	269	238	246	254	262	270	239	247	255	263	271	240	248	256	264	272	241	249	257	265	273	242	250	258	266	274	243	251	259	267	275	244	252	260	268	276	245	253	261	269	277	246	254	262	270	278	247	255	263	271	279	248	256	264	272	280	249	257	265	273	281	250	258	266	274	282	251	259	267	275	283	252	260	268	276	284	253	261	269	277	285	254	262	270	278	286	255	263	271	279	287	256	264	272	280	288	257	265	273	281	289	258	266	274	282	290	259	267	275	283	291	260	268	276	284	292	261	269	277	285	293	262	270	278	286	294	263	271	279	287	295	264	272	280	288	296	265	273	281	289	297	266	274	282	290	298	267	275	283	291	299	268	276	284	292	300	269	277	285	293	3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A Table
showing
the Do-
minical
Letter for-
ever, ac-
cording to
the Grego-
rian Ac-
count, by
R. Heath

Old Hund. Yrs of Christ	Old Hund. Years.	Old Hund. Years.	Every Four Hund Years
100	200	300	400
500	600	700	800
900	1000	1100	1200
1300	1400	1500	1600
1700	1800	1900	2000
2100	2200	2300	2400
2500	2600	2700	2800
2900	3000	3100	3200
3300	3400	3500	3600
3700	3800	3900	4000
4100	4200	4300	4400

0	100	200	300	400	500	600
700	800	900	1000	1100	1200	1300
1400	1500	1600	1700	1800	1900	2000
2100	2200	2300	2400	2500	2600	2700
2800	2900	3000	3100	3200	3300	3400
3500	3600	3700	3800	3900	4000	4100
4200	4300	4400	4500	4600	4700	4800
4900	5000	5100	5200	5300	5400	5500
5600	5700	5800	5900	6000	6100	6200
6300	6400	6500	6600	6700	6800	6900
7000	7100	7200	7300	7400	7500	7600
7700	7800	7900	8000	8100	8200	8300
8400	8500	8600	8700	8800	8900	9000
9100	9200	9300	9400	9500	9600	9700
9800	9900	10000	10100	10200	10300	10400

Because in 400 Gregorian Years there are 3 Days less than in 400 Julian Years, being 146097 Days, or 20871 Weeks just, the Reason of the above Revolution of the Sunday Letter, in 400 Years, is evident: Being the Weekly Account of Time.

It being an ancient Custom to put a against the first Day of Jan. in each Calendar Year, b against the Second, c against the Third; and so on, through- out the Year, the Sunday Letter being once known, from above, the Week Day for the first of January, or any other Month, or Day of any Month, is thereby also known.

A TABLE showing the Domini-
cal Letter for ever, according to
the Julian Account, by R. Heath.

0	100	200	300	400	500	600
700	800	900	1000	1100	1200	1300
1400	1500	1600	1700	1800	1900	2000
2100	2200	2300	2400	2500	2600	2700
2800	2900	3000	3100	3200	3300	3400
3500	3600	3700	3800	3900	4000	4100
4200	4300	4400	4500	4600	4700	4800
4900	5000	5100	5200	5300	5400	5500
5600	5700	5800	5900	6000	6100	6200
6300	6400	6500	6600	6700	6800	6900
7000	7100	7200	7300	7400	7500	7600
7700	7800	7900	8000	8100	8200	8300
8400	8500	8600	8700	8800	8900	9000
9100	9200	9300	9400	9500	9600	9700
9800	9900	10000	10100	10200	10300	10400

EXAMPLE. What is the Ju-
lian Dominical Letter for 1752?

Under 1700, at the Top Column, against 52, on the Left-hand, among the Years above Hundreds stands E D, the Dominical Letters required. The first used for January, and to Feb. 24, the latter for all the rest of the Year: And the same with respect to the Gre- gorian Sunday Letters, which are three Letters exclusive counting back, of the Julian Dominicals, or the 11th Place, counting forward, the diff. of Days in our present Account of Time, forward of the Julian. The first 7 Letters of the Alphabet counted forward, from the Bottom of the Page, will shew what Letter is Right.

Of the CORRECTION of the CALENDAR, in September 1752, from the Julian to the Gregorian Account of Time, and CELEBRATION of EASTER.

THE different Length of the Year, since the first Account of Time, still various, in the same, and different Nations, at certain intercalary Periods, accounts for the Confusions in Chronology; by which every remote Event, or memorable Transaction of Antiquity is difficult or dubious to point out.

The Christian *Æra*, according to Astronomy, is made to commence above Four Years sooner than by Account of 365 Days and 6 Hours; the mean Length of each *Julian Year*. And *Julius Cæsar* reformed the *Calendar*, from the old *Grecian* and *Roman Account*, at the End of the 46th Year before the reputed Birth of *Christ*.

By reckoning 365 Days, 6 Hours, for 365 Days, 5 Hours, 48 Minutes, 54 Seconds, 41 Thirds, 27 Fourths, the mean Solar Year, according to *Dr. Halley*, the Seasons go back 11 Minutes, 5 Seconds, 13 Thirds, 33 Fourths, each Year, or 44 Minutes, 21 Seconds, 14 Thirds, 12 Fourths, every 4th Year; which is at the Rate of 3 Days, 1 Hour, 55 Minutes, 23 Seconds, 40 Thirds, in 400 *Julian Years*, or 10 Days, 23 Hours, 43 Minutes, or about 11 Days since 325, when the Council of *Nice* settled the *Calendar*, for observing the Time of *Easter*; according to the *Vernal Æquinox*, (then supposed on the 21st of *March*) and the Full Moon happening thereon, or next after it; *Easter-Day* being ordered on the *Sunday* following that Full Moon.

To rectify the falling back of the *Æquinoxes*, the Difference between the Old and New Style, it is ordained by Act of Parliament, made 1751, that 11 Days be left out of the Month of *September* 1752, viz. that the 3d be deemed and called the 14th Day thereof, the 4th the 15th, and so on, throughout the Year; which therefore is made to consist of 355 Days only, instead of 366, as otherwise had been reckoned.

For keeping a Conformity between our own and the foreign Account of Time (through the greatest Part of *Europe*) as well as for preventing the Seasons running back, as formerly, it is ordained that every Fourth Hundred Year shall consist of 366 Days, as usual; but that every other whole Hundred Years shall consist of 365 Days only; similar to the 3 successive Years after each *Leap-Year*: Thereby providing for the 3 Days which the *Æquinoxes* fall back in 400 Years *Julian*; the Years betwixt which whole Hundreds, to be common, and *Bissextile*, as formerly.

The *Date* of the Year, from 1752, to begin on the First of *January*.

That a mutual Correspondence be kept between our *Sun* and *Moon*, the Golden Numbers are to stand against the Full Moons, on, or next after, the 21st of *March*, and those to be shifted accordingly, ever since *Pope Gregory XIII.* reformed the *Calendar*, in *October*, 1582: whereby the Time of the Protestant and Popish Celebration of *Easter*,

are now made to agree, in Conformity to the Error, established, of the *Vernal Equinox* happening on the 21st of *March*, instead of the true *Vernal Equinox* happening on the 20th thereof; tho' neither the Motions of the Heavens, nor the said Celebration are under the same *Pope's* pretended Supremacy.

Hilary and *Michaelmas* Days and Terms, after the 2d of *September*, 1752, to be as formerly.

Easter-Day, to be the First *Sunday* after the Full Moon which happens upon, or next after the 21st of *March*; and if the Full Moon falls upon a *Sunday*, *Easter-Day* to be the *Sunday* after.

The *Movable Feasts*, depending on *Easter*, to be determined by *Easter*, as formerly, as are set down in our *Almanac Royal*.

Courts of *Session* and *Exchequer*, in *Scotland*, and all Markets, Fairs, and Marts, Times for opening and inclosing of Commons of Pasture, the Payments of Rents, Annuities, and Sums of Money at Interest, the Delivery of Goods, Commencement and Expiration of Leases, and also the Time of coming of Age (not to be accelerated) to be reckoned according to the *natural Day*, as before the Act of Parliament, for altering the Style, took Place.

The *Vernal Equinox*, at the Council of *Nice*, happened on *March* the 20 Day, 11 Hour, 25 Minutes, in the Forenoon, according to *Dr. Halley's* Tables; which, among Astronomers, is on *March* 19 Day, 23 Hour, 25 Minutes, P. M.; and not on 21st Day, according to Error established.

When the Golden Numbers are advanced by 4, the *New* or Full Moons happen earlier by just 14 Days; which do not agree with our reformed Account by a Day or two, in some Cases; that is after 4 *Julian* Years, consisting of 1461 Days: For the Moon's mean Motions applied for finding the Lunar Anticipation, according to the *Julian* Account, can only correspond with the Moon's mean Places, at any Time.

As our Table for finding the *Dominical Letter*, by Inspection, according to a Revolution of each *Dominical Letter* in 400 *Gregorian* Years, is an Improvement on the Table for finding the *Dominical Letter*, published by Authority, we shall make farther Improvements on other Tables, in the Account of Time.

N. B. The respective Prizes fall by Lot to Mr. *Ralph Hulse*, *Hermes Trimegistus*, and *Halleensis*.

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